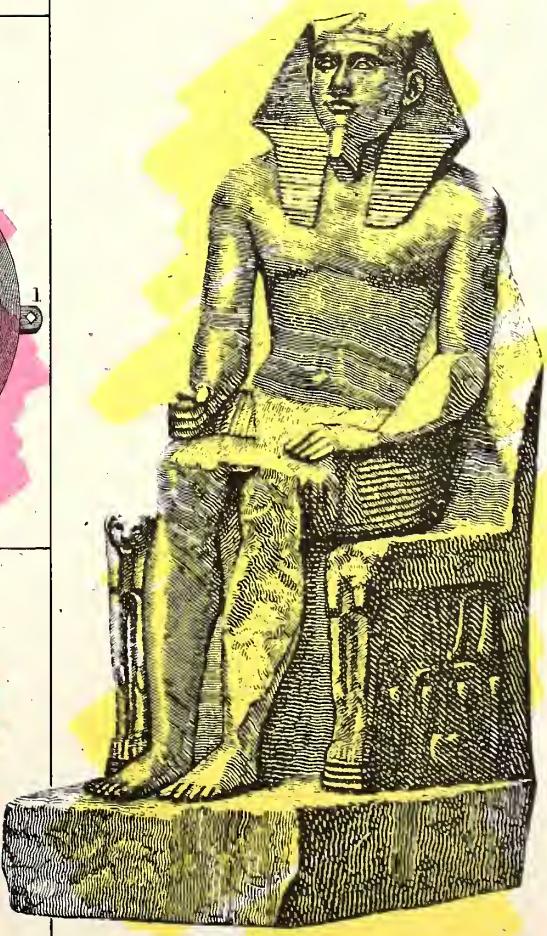
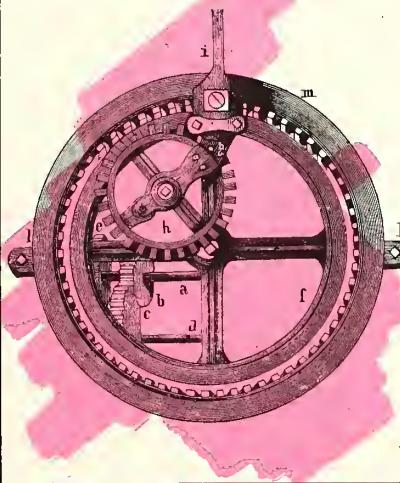
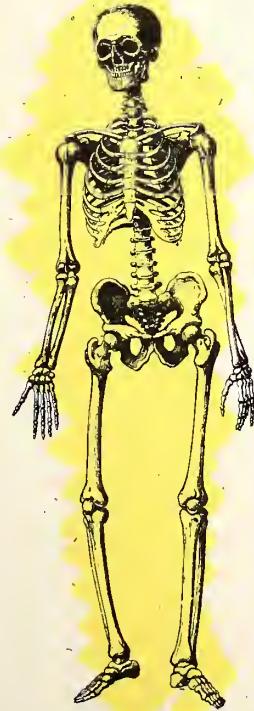
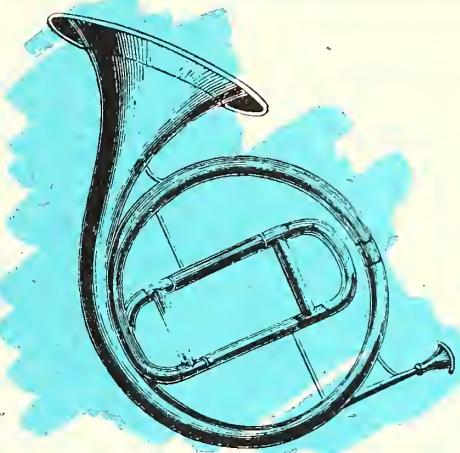
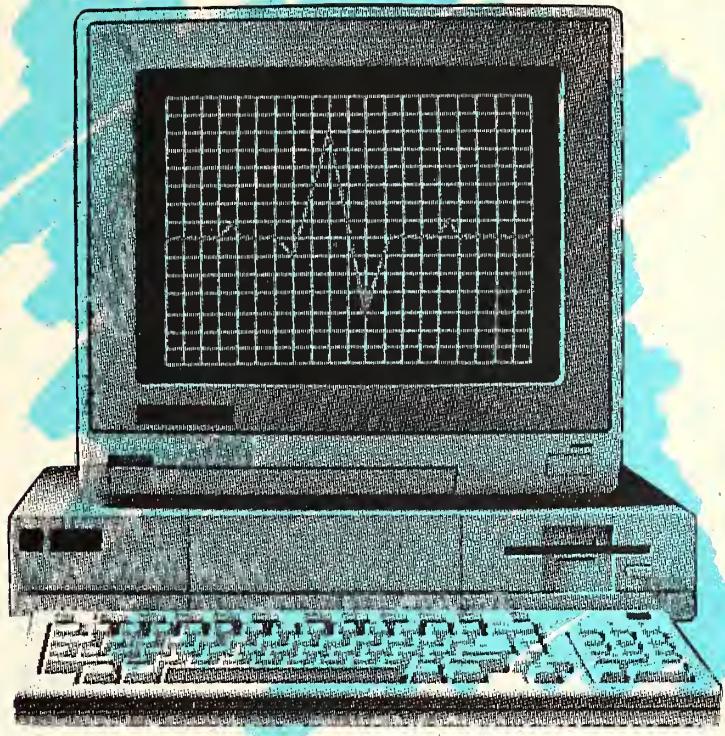


UNDERGRADUATE

CATALOG

BULLETIN OF
MEMPHIS STATE
UNIVERSITY



1990 • 91

The **Bulletin** of Memphis State University is composed of the following publications: *Undergraduate Catalog*, *Graduate School Catalog*, *The Cecil C. Humphreys School of Law Issue*, and *The Student Handbook*. *The Schedule of Classes* (Fall, Spring, and Summer) is an official extension of the **Bulletin**. All of these publications have been designed to provide current and prospective students, faculty, and staff with a comprehensive description of the University and its academic programs, regulations, services, and activities. Recommendations concerning these publications should be addressed to the Director of Curriculum Planning in the Office of Academic Affairs. A brief description of each publication follows.

The **UNDERGRADUATE CATALOG** provides the Memphis State University student and prospective students with a detailed description of the curriculum, admission information, the requirements for graduation, and the academic regulations. The inside front cover of this publication includes policy pertaining to degree requirements. Because students may graduate using the degree requirements from any valid catalog beginning with the year in which they were first admitted to undergraduate study, the issue received upon admission should be retained by the student.

The **GRADUATE SCHOOL CATALOG** provides current and prospective graduate students with a description of the University, graduate program requirements, and graduate school regulations. Admission requirements, application form, and fees are also included.

The **CECIL C. HUMPHREYS SCHOOL OF LAW ISSUE** of the **Bulletin** provides current and prospective law students with a description of the degree requirements, admissions requirements, fees, and activities of the School of Law. An application form is also provided.

The **STUDENT HANDBOOK** provides new students with a brief description of the areas of Student Educational Services, student activities, campus services, policies and procedures related to Student Educational Services and the Code of Conduct. Each entering student receives a copy of this publication and is responsible for becoming familiar with the Code of Conduct and the policies and procedures.

The **SCHEDULE OF CLASSES** is published a few weeks prior to each academic term (Fall, Spring, and Summer). It contains a detailed outline of the registration procedure, individual course offerings (course, time, days, location, and instructor), and course or program revisions made since the publication of the most recent *Undergraduate Catalog* and the *Graduate School Catalog*. It is an official extension of these catalogs. The Academic Calendar listing all deadlines is included in the catalogs and in the *Schedule of Classes*. The Registration Calendar is found in the *Schedule of Classes*.

Directory for Correspondence

Inquiries will receive attention if addressed to the administrative offices below at Memphis State University, Memphis, Tennessee 38152.

Admission	Dean of Admissions, Records, and Registration
Degree Requirements	Dean of the college in which the degree is offered
Entrance Examination	Dean of Admissions, Records, and Registration
Evaluation of Credits	Dean of Admissions, Records, and Registration
Off-Campus Credit Courses	Director of MSU Jackson Center
Financial and Business Affairs	Director of Finance
Graduate Studies	Dean of Graduate Studies
Handicapped Student Services	Director of the Office for Students with Disabilities
Housing	Director of University Housing
Pre-Professional Curricula	Dean of the college in which the curriculum is offered
Registration	Director of Registration and Scheduling
Scholarships and Loans	Director of Student Aid
Transcripts	Dean of Admissions, Records, and Registration
Veterans Services	Coordinator of Veterans Services
President of the University	Dean of Admissions, Records, and Registration
Administration Building (901) 678-2234	Administration Building (901) 678-2101

Bulletin of Memphis State University (PUB 779380) Second Class Postage paid at Memphis, Tennessee 38152.
POSTMASTER: Send address changes to Bulletin of Memphis State University, Memphis, TN 38152.

Vol. LXXIX, Number 1 — Undergraduate Catalog

April, 1990

Published four times yearly—April, May, June, July—by Memphis State University.

The validity date for degree requirements is Summer, 1997.

The University reserves the right to cancel or alter any part of this Catalog without notice (subject to the following):

The course offerings and requirements of the institution are continually under examination and revision. This catalog presents the offerings and requirements in effect at the time of publication, but is no guarantee that they will not be changed or revoked. The specific courses or activities constituting the degree requirements for any program are subject to substitution at any time prior to completion by the student. This catalog is not intended to state contractual terms and does not constitute a contract between the student and Memphis State University.

The institution reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students to be effective whenever determined by the institution. These changes will govern current and formerly enrolled students. Enrollment of all students is subject to these conditions. Current information may be obtained from the offices listed above. Any fees, charges or costs, and all academic regulations set forth in

this catalog are subject to change at any time, and all courses, programs and activities described in this catalog are subject to cancellation or termination by Memphis State University or the Tennessee Board of Regents at any time.

The institution provides the opportunity for students to increase their knowledge by providing programs of instruction in the various disciplines and programs through faculty who, in the opinion of the institution, are trained and qualified for teaching at the college level. However, the acquisition of knowledge by any student is contingent upon the student's desire and ability to learn and the application of appropriate study techniques to any course or program. Thus, the institution must necessarily limit representation of student preparedness in any field of study to that competency demonstrated at that specific point in time at which appropriate academic measurements were taken to certify course or program completion. (TBR 2.04.0001)

1 9 9 0 • 9 1

U N D E R G R A D U A T E
CATALOG

B U L L E T I N O F
M E M P H I S S T A T E U N I V E R S I T Y

Memphis State University offers equal educational opportunity to all persons

without regard to race, religion, sex, creed, color, national origin, or handicap.

The University does not discriminate on these bases in the recruitment and

admission of students, the recruitment and employment of faculty and staff,

and the operation of any of its programs and activities, as specified by federal

laws and regulations. The designated coordinator for University compliance

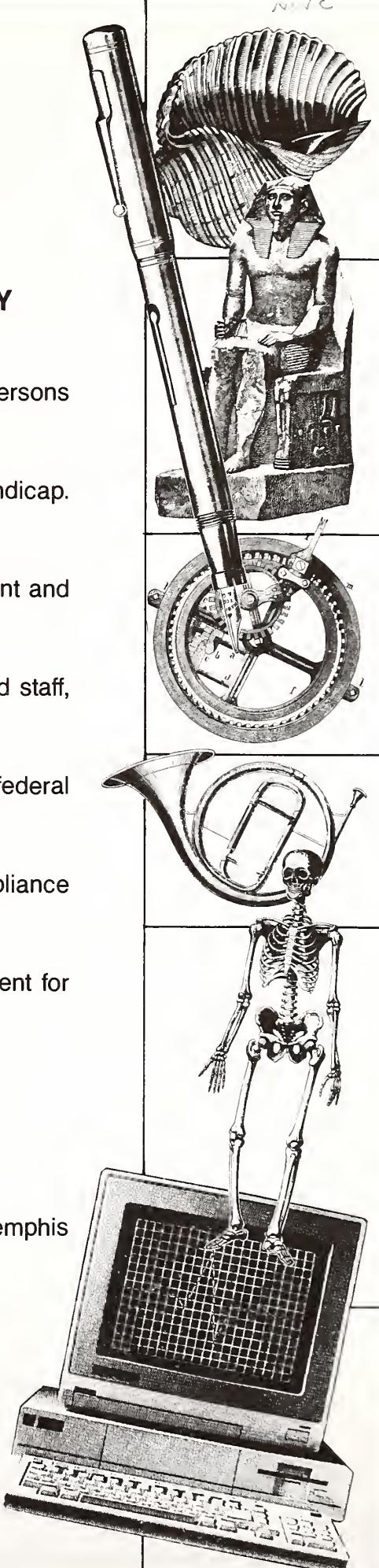
with Section 504 of the Rehabilitation Act of 1973 is the Vice President for

Student Educational Services.

The catalog cover was designed by Jessica Williams Anderson, of Memphis

State's Art Services.

Thomas G. Carpenter, Ph.D., President
Cecil C. Humphreys, Ph.D., President Emeritus



CAMPUS DIRECTORY

OFFICE	BUILDING	TELEPHONE (678-XXXX)	OFFICE	BUILDING	TELEPHONE (678-XXXX)
Academic Counseling	Scates Hall 107	2062	Information Center	3641 Central Avenue	2040
Add/Drop Courses	See your advisor		Insurance, Student	Health Center	2287
Admissions	Administration 215	2101	International Student Advisor	University Center 417	2054
General Information		2000	Library	Brister Library Tower	2205
Freshman Information		2390	Lost and Found	University Center	
Transfer Information		2111		Information	2041
Graduate Admissions		2911		University Center 425	2093
Information		MEMPHIS STATE REVIEW		Patterson 230	4531
Law School Information	Law School 201	2073	Photo Services	Meeman Journalism 329	2196
International Student	Administration 216	2911	Post Office	Jones Hall 107A	2380
Alumni Affairs	Normal 635	2701	Probation (Academic)	Administration 167	2393
Ambassadors Board	Normal 635	2701	Psychological Services Center	Psychology 126	2147
Athletics (Intercollegiate)	Normal 101	2335	Publications Committee	Administration 303	2609
Men		2315	Registration/Scheduling	Administration 161	2675
Women			Religious Activities	University Center 425	2093
Calendar of Events			Reservations		2801
Activities	University Center 214A	2041	Tennis, Racquetball, Handball		
Recreation/Intramural Events	Physical Education 155	2802	Residence Life	Richardson Towers 011	2295
University Center Events	University Center 214A	2041	Director, Reservations,		
Conferences	Fogelman Executive		Married Apartments		
Career Counseling	Center 206	3700	Security	Administration 151	2087
Center for Student	Scates Hall 106	2228	Student Aid	Scates Hall 312	4357
Development	Scates Hall 111	2067	Student Development	Scates Hall 216	2303
Class Attendance	See your professor		Student Educational Services	Administration 377	2291
Computer Services	Administration 112	2406	Student Government		2114
Continuing Education	Administration 360	2991	Association	University Center 411	2051
Counseling	Scates Hall 111	2067	Student Information System		2037
Academic	Scates Hall 107	2062	Student Life, Dean	University Center 443	2187
Career	Scates Hall 104	2228	Student Records		
Personal	Scates Hall 111	2067	Academic	Administration 119	2671
DESOFT Office	Meeman Journalism 113	2195	Personnel	Scates Hall 204	2299
Developmental Studies	Administration 171	2028	Student with Disabilities	Scates Hall 215	2880
Drop/Add Courses	See your advisor		Telephone Service		
Educational Support Program	Winfield Dunn 143	2704	Testing Center	Jones Hall 101	(Telephone or TDD)
Employment/Placement			Theatre Box Office	Health Center 111	2999
Student (on campus)	Scates Hall 312	2303		Theatre &	2428
Student (off campus)	Health Center 112	2016		Communication Arts	2576
University Placement	Scates Hall 315	2239	Tickets		
Teacher Placement	Education 215	2728	General	University Center 117	2043
Evening Services Dean	Administration 167	2393	Athletics	Athletics Office Bldg. 109	2331
Financial Aid	Scates Hall 312	2303	Transcripts	Administration 143	3927
Food Services Director	Jones Hall	3079	Transfer Student Information	Administration 215	2111
Fraternity/Sorority Activities	University Center 425	2093	University Center		
Grade Appeals	See Catalog & your professor		Operations	University Center 105	2031
Graduate Dean	Administration 315	2531	Program	University Center 405	2035
Handicapped Student Services	See Students with Disabilities		Information	University Center 201D	2041
Health Services	Health Center	2287	Vending Refunds	University Center 201	2041
HELMAN			Withdrawal		
Editorial	Meeman Journalism 320B	2192	Graduate	Administration 315	2531
Business	Meeman Journalism 318	2191	Law	Law School 207B	2660
Identification Cards			Undergraduate	Scates Hall 120	2067
(New and Replacement)	Administration 176	3028	WSMS/FM 92	Theatre &	
				Communication Arts	2579
				Meeman Journalism 113	2195

CONTENTS

UNIVERSITY CALENDAR FOR 1990-91	4
DEGREE PROGRAM PLANNING	5
1. DESCRIPTION OF THE UNIVERSITY	
General Description	6
The Memphis Community	7
Academic Program Accreditation	7
Facilities, Research, and Services	7
The Graduate School	10
Cecil C. Humphreys School of Law	10
2. ADMISSION REQUIREMENTS	
Regular Undergraduate Applicants	11
Special Category Applicants	12
Former Students Readmission	14
High School Curriculum Requirements	14
3. EXPENSES AND AID	
General Application & Registration	15
Student Housing	16
Miscellaneous Fees	17
Summary of Expenses	18
Appeal Procedures	18
Student Aid	
Scholarships	18
Grants	21
Loans and Student Employment	22
Satisfactory Progress Policy	23
4. STUDENT ACTIVITIES, SERVICES, HONORS AND AWARDS	
Student Development	24
Student Life	25
Other Activities and Services	26
Honors and Awards	27
5. ACADEMIC REGULATIONS	
Orientation, Advising, & Registration	29
Appeals	29
Class Attendance	29
Classification of Students	30
Scholastic Standards	30
Additional Means of Earning Credit	33
6. GRADUATION FROM THE UNIVERSITY	
General Requirements	35
General Education	35
Requirements for Teacher Licensure	36
Catalog Applicability	36
Second Bachelor's Degree	36
7. COLLEGES, DEGREE PROGRAMS, & COURSES	
COLLEGE OF ARTS & SCIENCES	38
Anthropology	41, 45
Biology	42, 46
Chemistry	42, 47
Criminology and Criminal Justice	42, 49
English	42, 50
Foreign Languages & Literatures	42, 51
Geography and Planning	43, 53
Geological Sciences	43, 54
History	43, 54
International Relations	43, 56
Mathematical Sciences	43, 56
Philosophy	44, 58
Physics	44, 58
Political Science	44, 59
Psychology	44, 61
Sociology & Social Work	44, 61
FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS	63, 70
School of Accountancy	67, 70
Economics	42, 67, 70
Finance, Insurance, & Real Estate	68, 71
International Business	69
Management	68, 72
Management Information Systems & Decision Sciences	68, 72
Marketing	69, 73
COLLEGE OF COMMUNICATION AND FINE ARTS	74
Art	75, 80, 81
Journalism	80, 83
Music	77, 80, 84
Theatre & Communication Arts	76, 80, 88
COLLEGE OF EDUCATION	92, 98
Counseling & Personnel Services	98
Curriculum & Instruction	99
Educational Administration & Supervision	100
Foundations of Education	100
Health, Physical Education, & Recreation	97, 100
Home Economics	97, 102
Special Education	103
HERFF COLLEGE OF ENGINEERING	105
Civil Engineering	106, 109
Electrical Engineering	106, 110
Engineering Technology	108, 111
Mechanical Engineering	107, 113
LOEWENBERG SCHOOL OF NURSING	114, 116
UNIVERSITY COLLEGE	117
INDEPENDENT PROGRAMS	123
International Studies	123
University Honors Program	124
Aerospace Studies	124
Military Science	126
Naval Science	128
Audiology & Speech Pathology	128
Interdisciplinary Studies	129
Memphis State University Libraries	129
Orientation Program	129
Remedial and Developmental Studies	129
8. FACULTY AND STAFF	131
TENTATIVE 1991-92 UNIVERSITY CALENDAR	142
INDEX	143
APPLICATION FOR ADMISSION	145

1990						
S	M	T	W	T	F	S
AUGUST						
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	
SEPTEMBER						
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						
OCTOBER						
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			
NOVEMBER						
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	
DECEMBER						
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
1991						
S	M	T	W	T	F	S
JANUARY						
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
FEBRUARY						
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		
MARCH						
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						
APRIL						
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				
MAY						
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	
JUNE						
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						
JULY						
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			
AUGUST						
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

1990-91 UNIVERSITY CALENDAR

The calendar is subject to change at any time prior to or during an academic term due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state agencies. (TBR 2:04:00:01)

FALL SEMESTER 1990

AUGUST 21-23: FALL 1990 Continuous Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Fall 1990 semester.

AUGUST 22: Meeting of new members of the University faculty, 8:30 A.M. Meeting of entire University faculty, 10:30 A.M., followed by meetings of colleges and departments.

AUGUST 23: Faculty advising for Fall 1990 Registration.

AUGUST 24 and 26-29: FALL 1990 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Fall 1990 Semester.

AUGUST 30: Classes begin.

SEPTEMBER 3: Holiday: Labor Day.

SEPTEMBER 6: Last day to add or to register for Fall 1990 courses.

SEPTEMBER 26: Last day for removing Summer Session "Incomplete" grades.

OCTOBER 19: Last day for all students to drop courses.

Last day for all students to withdraw from the University.

NOVEMBER 12-15, 19-21, and 26-29: SPRING 1991 Priority Registration. For detailed dates and times, see the *Schedule of Classes* for the Spring 1991 Semester.

NOVEMBER 21: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in May, 1991.

NOVEMBER 22-25: Holiday: Thanksgiving.

DECEMBER 6: Classes end. (Regularly scheduled MWF morning classes will meet at corresponding times today.)

DECEMBER 7-13: Final examinations.

DECEMBER 15: Commencement.

SPRING SEMESTER 1991

JANUARY 9-11 and 13: SPRING 1991 Continuous Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Spring 1991 Semester.

JANUARY 11: Faculty advising.

JANUARY 14-17: SPRING 1991 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Spring 1991 Semester.

JANUARY 18: Classes begin.

JANUARY 21: Holiday: Martin Luther King's Birthday.

JANUARY 24: Last day to add or to register for Spring 1991 courses.

JANUARY 29: Last day for removing Fall "Incomplete" grades.

MARCH 8: Last day for all students to drop courses.

Last day for all students to withdraw from the University.

MARCH 10-17: Spring Break.

APRIL 8-11: SUMMER 1991 Priority Registration. For detailed dates and times, see the *Schedule of Classes* for the Summer 1991 Semester.

APRIL 10: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in August, 1991.

APRIL 15-18 and 22-25: FALL 1991 Priority Registration. For detailed dates and times see the *Schedule of Classes* for the Fall 1991 semester.

MAY 1: Classes end.

MAY 2: Study Day.

MAY 3-9: Final examinations.

MAY 11: Commencement.

Dead Week. Definition: The four day period preceding final examinations. No student social or athletic functions shall be scheduled during Dead Week.

Study Day. Definition: The day prior to final examinations during most regular semesters. No academic activities shall be scheduled on Study Day. No study or review sessions which the student may feel obligated to attend may be scheduled.

Final Examination Period. No examination shall be given at a time other than the scheduled time except with written permission from the department chair and the college dean. No social or athletic functions shall be scheduled during the Final Examination Period.

Intercollegiate athletics are excepted from the above policies.

PROGRAM PHASE OUT CALENDAR

The date in parenthesis is the last calendar year in which anyone may graduate with the following majors or degrees which have been discontinued and are being phased out: Commercial Music, *BFA only* (1994), Construction Technology (1992), Geology, BSG (1991), Latin American Studies (1995), Physical Science (1966), Trade and Industrial Vocational Technical Education (1992), Urban Studies (1994), Vocational Home Economics (1992).

FIRST SUMMER TERM 1991

MAY 23, 24, 26: SUMMER 1991 Continuous Registration and Drop/Add. For detailed dates and times see the *Schedule of Classes* for the Summer 1991 Term.

MAY 27: Faculty advising.

MAY 27-29: SUMMER 1991 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Summer 1991 Session.

MAY 30: Classes begin.

MAY 31: Last day to add or to register for First Term courses.

JUNE 14: Last day for **all** students to drop First Summer Term courses.
Last day for **all** First Summer Term students to withdraw from the University.

JUNE 25: Last day for removing Spring Semester "Incomplete" grades.

JUNE 24-27: FALL 1991 and SECOND SUMMER 1991 Continuous Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the particular term.

JULY 2: First Summer Term classes end.

JULY 3: First Summer Term exams.

SECOND SUMMER TERM 1991

JULY 8: SECOND SUMMER 1991 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Summer 1991 Session.

JULY 9: Second Summer Term classes begin.

JULY 10: Last day to add or to register for Second Term courses.

JULY 24: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred December, 1991.
Last day for **all** students to drop Second Summer Term courses.
Last day for **all** Second Summer Term students to withdraw from the University.

AUGUST 5-8: FALL 1991 Continuous Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Fall 1991 Semester.

AUGUST 8: Second Summer Term classes end.

AUGUST 9: Second Summer Term exams.

AUGUST 11: Commencement.

EXTENDED SUMMER TERM 1991

MAY 27: Faculty advising.

MAY 27-29: SUMMER 1991 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Summer 1991 Session.

MAY 30: Classes begin.

MAY 31: Last day to add or to register for Extended Term courses.

JUNE 24-27: FALL 1991 Continuous Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Fall 1991 Semester.

JUNE 25: Last day for removing Spring Semester "Incomplete" grades.

JULY 3: Last day for **all** students to drop Extended Summer Term courses.
Last day for **all** Extended Summer Term students to withdraw from the University.

JULY 4-8: Holiday break: Independence Day.

AUGUST 5-8: FALL 1991 Continuous Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Fall 1991 Semester.

AUGUST 8: Extended Summer Term classes end.

AUGUST 9: Extended Summer Term exams.

AUGUST 11: Commencement.

USING THE CATALOG FOR DEGREE PROGRAM PLANNING

Each student is responsible for fulfilling all of the requirements for the degree program being pursued and for following the procedures and regulations as stated in the *Catalog in effect when entering college*. The *Catalog* is valid for seven years. Students should keep a copy of the *Catalog* they enter under until they graduate. Assistance from an advisor is helpful in planning the program of studies and in selecting the specific courses to be taken for each semester.

The *Graduation from the University* section of the *Catalog* outlines the minimum **university level** degree requirements. Some colleges specify the exact manner in which the university level requirements must be met. In addition to these, the student must fulfill the **college level** requirements for the degree and the **major** requirements. If the admission and/or retention standards for a particular college or department differ from the university requirements, they will be listed in the college degree program description. If they do not, the university requirements apply. The guidelines below will be helpful in planning which program to follow.

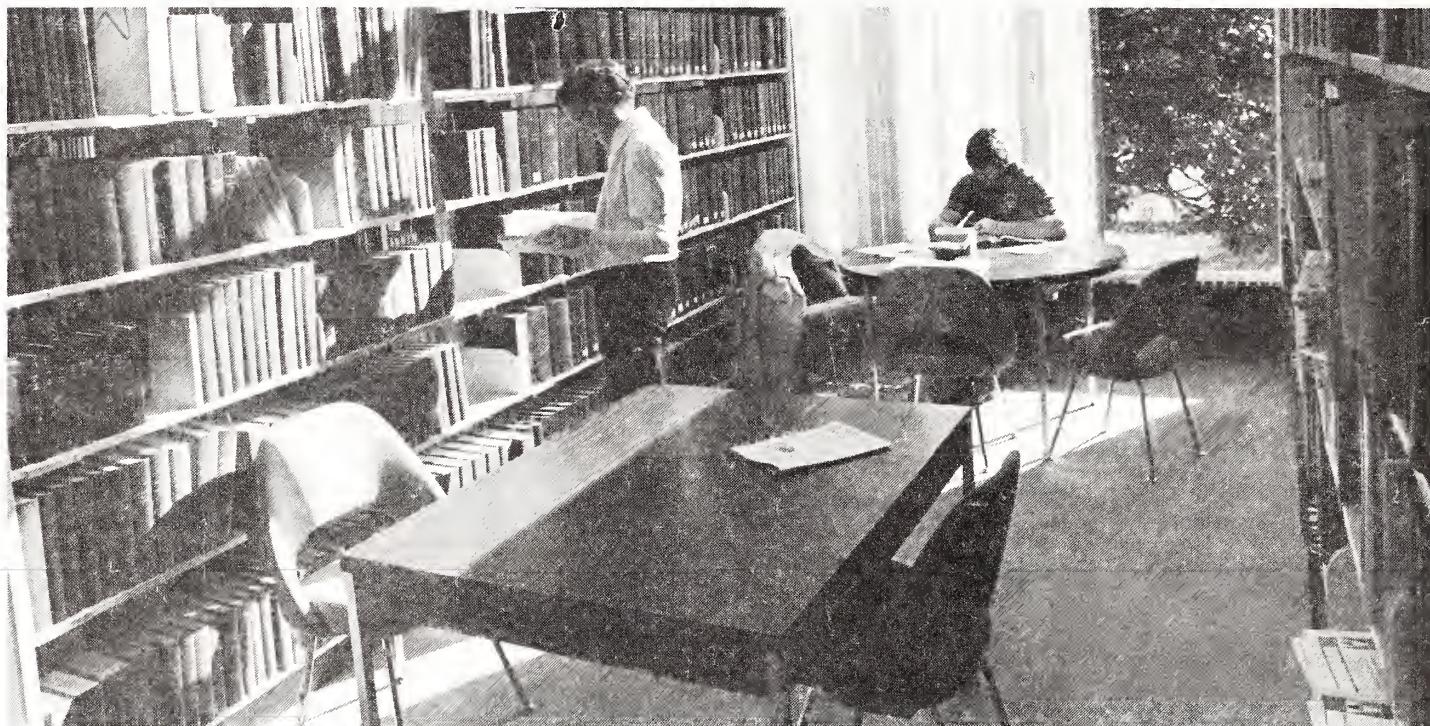
- (1) Read the *Catalog* to investigate what options are available;
- (2) consult with an academic advisor in the Academic Counseling Unit and/or the colleges which offer majors which are of interest to you;
- (3) talk with the departmental faculty in these areas of interest;
- (4) take advantage of the counseling offerings of the center for Student Development (Testing, Career Counseling, Academic Counseling, Personal/Psychological Counseling, and the Educational Support Program);

- (5) become familiar with the *Academic Regulations* section of the *Catalog*; determine the grades which are needed to insure retention and graduation as well as honors classifications in the university and in individual programs;
- (6) if you are undecided about a major area, begin your program of studies with those courses required for all degrees.

After a major has been chosen:

- (1) Consult with your advisor to determine what procedures are necessary to declare a major;
- (2) read the entire section of the *Catalog* which relates to the degree and major selected: note all degree requirements listed for the college such as the number of hours required within the college and outside the college and the number of upper division hours required; list all the general education courses required for the college or obtain a degree sheet from the college advisor; note the major requirements (when choices are allowed, be sure to consult with your major advisor);
- (3) plan your coursework semester by semester; try to complete all of your lower division courses (1000-2000) during your first two years; be sure to check for prerequisites before enrolling in any courses, especially upper division courses; take the courses in the proper sequence.

To complete a 132 semester hour degree program in four years, you need to take 33 hours per year. The maximum allowed per semester (fall/spring) is 18 hours. Special permission must be received in order to carry more than 18 hours. Physical activity courses are not included in the 18-hour maximum.



1. DESCRIPTION OF THE UNIVERSITY

GENERAL DESCRIPTION

Goals of the University

From the opening of its doors in 1912 as a normal school for training teachers to its present status as one of Tennessee's two comprehensive universities, Memphis State has been thrust forward by the growth of Memphis and the Mid-South. A town oriented to a rural economy and culture in 1900 grew into a large urban and commercial center mid-century, and the city's public institution of higher learning experienced comparable growth.

The metropolitan and regional requirements for more highly trained university graduates have, of necessity, caused Memphis State to expand all its offerings in arts and sciences, business, the fine arts, education, engineering and technology, law, and several special professional fields. Degrees range from the baccalaureate through the doctorate. More than 75 percent of the full-time faculty have earned the highest possible degree in their fields. The university strives to optimize its resources in its quest for excellence through teaching, research, and service.

As enrollment settles in the 20,000 range, Memphis State is committed to developing programs of the highest quality, for only through such a commitment will it be a standard of quality in higher education for the citizens of the State of Tennessee. As

the comprehensive university of the State University and Community College System of Tennessee, Memphis State is striving to increase the ratio of doctoral programs it offers which will also require an increased emphasis on research and scholarship acitivity. The university is committed to serving a diverse student body of all races, sexes, and nationalities. Every Memphis State student is expected, upon graduation, to be able to compete effectively with his or her counterparts from any other respected university in the nation.

The primary mission of Memphis State University is, therefore, to be a comprehensive university that provides an environment for intellectual, cultural, and ethical development through a wide range of programs. Memphis State University strives to achieve and maintain this mission as part of two major communities: the national and international academic community of scholars and students; and the state of Tennessee and the Mid-South, especially metropolitan Memphis. In both communities, the university strives for excellence and seeks to contribute substantially to the quality of life of its various constituencies.

History

The roots of Memphis State date back to September 15, 1912, with the establishment and opening of the West Tennessee State Normal School, which provided for the training of primary and secondary education teachers. However, the seeds for

the normal school's creation were sown three years earlier, in 1909, when the Tennessee General Assembly passed a General Education law calling for the establishment and maintenance of three normal schools, one school located in each of the three grand divisions of the State.

The eastern edge of Memphis became the site for the West Tennessee State Normal School, which in 1925 became the West Tennessee State Teachers College. In 1941, the college's curriculum in liberal arts was expanded, and the name was changed to Memphis State College, an institution serving three to four thousand students. The undergraduate program was reorganized into three schools and a graduate school added in 1951.

On July 1, 1957, Memphis State achieved its status as a university, and has since expanded its degree programs to serve a student population of over 20,000.

Governing Body

The governance and control of Memphis State University is vested in the Tennessee Board of Regents. The Board of Regents consists of eighteen members including thirteen appointed by the Governor; four *ex officio* members - the Governor, Commissioner of Education, Commissioner of Agriculture, and the Executive Director of the Tennessee Higher Education Commission - and the immediate past Commissioner of Education. Nine appointed members are from each congressional

district, and three are approved at-large from different geographical areas of the state. A student regent is appointed from among the system institutions for a one-year term.

Organization

The schools and colleges which comprise the University are The Graduate School, The Cecil C. Humphreys School of Law, The University College, The School of Nursing, and five colleges offering graduate and undergraduate programs: The College of Arts and Sciences, The Fogelman College of Business and Economics and The School of Accountancy, The College of Communication and Fine Arts, The College of Education, and The Herff College of Engineering. In addition, there is one independent graduate department, Audiology and Speech Pathology. At the undergraduate level, independent departments are: Aerospace Studies (Air Force ROTC), Military Science (Army ROTC), and Naval Science (Navy ROTC). The university also offers a University Honors Program for highly motivated students seeking exceptional and challenging programs of study in a variety of disciplines or at the university level. The colleges, departments, and the undergraduate degree programs which they offer are described in more detail in the *Colleges and Degree Programs* section of this catalog.

with shopping, recreation, and entertainment centers nearby. In addition to the facilities on the main campus, the university has research and athletic-training facilities and married students' housing on the South Campus.

ACADEMIC PROGRAM ACCREDITATION

The university is fully accredited by the Southern Association of Colleges and Schools. The various colleges, schools and departments and/or the individual programs are accredited by the following appropriate accrediting agencies:

Accreditation Board for Engineering and Technology
 Accrediting Council on Education in Journalism and Mass Communication
 American Assembly of Collegiate Schools of Business
 American Bar Association
 American Council for Counseling and Development
 American Chemical Society
 American Dietetic Association
 American Home Economics Association
 American Planning Association
 American Psychological Association
 American Speech-Language-Hearing Association
 Council on Rehabilitation Education
 Council on Social Work Education
 National Association of Schools of Art and Design
 National Association of Schools of Music
 National Association of Schools of Public Affairs and Administration
 National Council for Accreditation of Teacher Education
 National League for Nursing

to faculty members and graduate students engaged in research.

Memphis State University has agreements with Rhodes College, the University of Tennessee - Memphis, LeMoyne Owen College, Mid-America Baptist Theological Seminary, Memphis Theological Seminary, Shelby State Community College, State Technical Institute at Memphis, University of Mississippi, and Christian Brothers College for shared use of their library collections by the students, faculty, and staff of these institutions.

Computer Facilities

Computing support for the instructional program of the University and for scholarly research is provided by Computer Services. The central computing system, is a Digital Equipment Corporation (DEC) VAX 8820 which has 64 million characters of main memory and more than ten billion characters of user disk storage; it supports interactive, batch, and network processing. The Training Center in Smith Chemistry Building contains 29 terminals and is used for hands-on training for faculty, staff, and students. Adjacent is an open lab with interactive, high-resolution graphics terminals. Other computing laboratories with academic mainframe terminals and remote high speed lineprinters are located in the Herff College of Engineering, the Fogelman College of Business and Economics, the Winfield Dunn Building, and Richardson Towers Building. Consultants are available in Computer Services and at the remote sites to assist the users of the mainframe academic computer. Access to BITNET, an international electronic network of scholars, is available to researchers through the academic mainframe computer. Consultants and demonstration labs are also available in the Life Sciences Building for microcomputer users.

More than 250 interactive terminals are provided for use in instructional and research programs. In addition to these terminals, there are special purpose minicomputers available in several individual departments including Geological Sciences, Electrical Engineering, Civil Engineering, Engineering Technology, and Mathematical Sciences. Also, there are more than 1,600 microcomputers which are available to support instruction and research throughout the university.

Fogelman Executive Center

The Fogelman Executive Center is a state-of-the-art conference and training facility designed to meet the needs of executives, managers, and professionals in all organizational areas. The center has fifty-one hotel rooms, twelve conference and seminar rooms (including two computer labs), and two dining rooms.

The staff of the Fogelman Executive Center provides coordination and planning services for all types of conferences and seminars. These services are available not only to conferences housed within the facility, but also to programs at non-

THE MEMPHIS COMMUNITY

Memphis, with a population of over 800,000, is one of the South's largest and most attractive cities. As a primary medical, educational, communication, and transportation center, Memphis offers a rich and full range of research opportunities and cultural experiences. The city, known worldwide for its musical heritage, has many fine restaurants, museums, and theaters, as well as one of the nation's largest urban park systems. Annual events include the Liberty Bowl game, Memphis in May International Festival, St. Jude Memphis Golf Classic, Great River Carnival, and Mid-South Fair. The medical complex in Memphis is the South's largest and one of the nation's foremost centers of medical research. A public transportation system provides easy travel between the university and other parts of the city.

Built on a bluff which soars over the mighty Mississippi, Memphis is devoted to preserving its own history even while it vigorously builds its own future. Clusters of stately old homes dot the city; some are still inhabited, some preserve the past as museums, some have been restored and recast into commercial establishments; all are home to images from a long-ago time.

The university's modern and beautifully landscaped campus is centrally located in an attractive residential area of Memphis,

FACILITIES, RESEARCH, AND SERVICES

Library Facilities

The libraries of Memphis State University include the John Willard Brister Library and specialized collections in the Department of Chemistry, the Department of Mathematical Sciences, the Department of Music, the Herff College of Engineering, the Cecil C. Humphreys School of Law, the Speech and Hearing Center, and the Bureau of Business and Economic Research. The total collection numbers more than 1,000,000 bound volumes and some 2,000,000 pieces of micromaterial.

The Brister Library contains a reference and bibliography section, an inter-library loan service, a map collection, the Mississippi Valley Collection (reflecting the history and culture of that region); it is also a depository for United States government documents, and Tennessee State documents. Private study carrels are available

university locations. Additionally, the Fogelman Executive center designs training and development programs for a wide range of managers and professionals. For these programs, center staff draw from the resources of the Memphis State Faculty, as well as outside experts, to conduct the programs.

Bureau of Business and Economic Research

The Bureau of Business and Economic Research is the organized research and public service unit of the Fogelman College of Business and Economics. The programs of the Bureau include public service to government agencies (state and local) and the business community, continuing education, and applied general research.

Jackson Center

Located on the campus of Jackson State Community College, the Jackson Center offers a wide variety of undergraduate and graduate courses and degree programs to students living in the Jackson Area. In addition, the Jackson Center houses the Office of Extended Programs, which coordinates course and program delivery outside of the Memphis area. The Jackson Center is administered through the University College.

Higher Education Alliance

This alliance is administered cooperatively by Memphis State University, Jackson State Community College, and the State Area Vocational-Technical School at Crump. Reporting through University College and located at the State Area Vocational-Technical School at Crump, it offers an array of undergraduate and graduate courses to students in its service area.

Bureau of Educational Service

The Bureau of Educational Service promotes and supports research, development, evaluation, and field services in the College of Education. Bureau personnel are active in the operation of projects for local, state, regional, and national education agencies. Services are provided to faculty members through staff development, funding source identification, proposal preparation assistance, and contract administration support.

Cartographic Services Laboratory

The Cartographic Services Laboratory provides assistance to the university community and the Mid-South in the production of maps, graphs, slides, including computer graphics, and other related materials designed for use in presentations, articles, reports, theses, dissertations, books, and exhibits. The Cartographic Services Laboratory is located in the Department of Geography and Planning.

Center for Earthquake Research and Information

The Center for Earthquake Research and Information was established in 1977 by the Tennessee State Legislature to provide the citizens of Tennessee, governmental agencies, and the news media such services as the following: (1) accurate, immediate reports and background information on the occurrence of regional earthquakes; (2) scientific research related to the causes and consequences of local earthquakes and to the possibility of earthquake prediction; (3) studies related to the desirability of earthquake resistant construction; (4) advice to the populace, business, government, and insurance groups on methods, means, and the feasibility of reducing earthquake damage. It operates as a research organization of Memphis State University. It supports some undergraduate student research in seismology and geophysics and civil engineering and cooperates with the Department of Geological Sciences in offering an undergraduate degree concentration in geophysics.

Center for the Humanities

The Center for the Humanities was founded in 1987. Its purpose is to support teacher and course development, independent and collaborative research, and public programs that will foster an understanding of the importance of the humanities and will establish a sense of intellectual community among humanities faculty at the university. The center sponsors faculty and visiting scholar lecture series, a Humanities Fellows Program which supports faculty scholarship, and course development grants.

Center for Electron Microscopy

The Center for Electron Microscopy provides facilities and expertise in the field of electron microscopy. Users of the center include researchers and graduate students in the biological and physical sciences.

Center for Manpower Studies

The Center for Manpower Studies, located in the Fogelman College of Business and Economics, conducts research on employment and training-related topics and provides technical assistance to federal, state, and local agencies. It also offers a variety of training programs for human resource development agencies throughout the southeast.

Center for Research on Women

Founded in 1982, the Center for Research on Women, which is located in the College of Arts and Sciences, has rapidly gained national recognition for its pioneering work on race, class, and gender. Its mission is to promote research in the field of women's studies with focus on southern women and women of color in the United States. Since its inception, the center has received grants for research and

research related activity from both foundation and government sources

Center for the Study of Higher Education

The Center for the Study of Higher Education, located in the College of Education, conducts research and sponsors workshops and conferences in higher education.

Chucalissa Indian Village and Museum (C. H. Nash Museum)

This partly reconstructed prehistoric Indian village on its original site and the museum are operated by the Department of Anthropology as an educational and research facility. The indoor and outdoor exhibits are designed to reconstruct prehistoric Indian life in the mid-South. Students are trained in the techniques of excavation, restoration and museum operations. The courses taught are listed in the Department of Anthropology offerings. Chucalissa is located 17 miles from the main campus.

Health, Physical Education and Recreation Complex

The H.P.E.R. Complex consists of the Physical Education Building (PEB) at Spottswood and Echles Street; and the Field House (FH) on the eastern border of the main campus. These buildings and outdoor facilities include: 21 PEB and 10 FH tennis courts; one PEB and three FH sports field areas with 4 softball diamonds, 4 shuffleboard courts, all-weather track and space for soccer, a basketball court, football, volleyball and frisbee golf course; 9 air-conditioned PEB and 6 FH racquetball-handball courts; indoor and outdoor swimming pools with diving wells; PEB weight rooms, PEB Nautilus weight room, men's steam room and separate men's and women's saunas.

Institute for Engineering Research

The Institute for Engineering Research, a unit of the Herff College of Engineering, provides a focal point for the research activities of the college. Its responsibilities fall into several areas all ultimately directed toward the acquisition, development, and support of research by members of the faculty. The Institute houses the following divisions: The Electro-Optics Division, The Bio-Medical Division, Center for River Studies, The Mechanics Division, and The Computer Division.

The researchers associated with the Institute include members of the faculty of the Herff College of Engineering, other interested faculty at Memphis State University, faculty of other educational institutions, particularly the University of Tennessee, Memphis, and people from industry and the professions who are interested and qualified to make contributions to projects undertaken by one of the divisions.

Institute of Governmental Service and Research

The Institute of Governmental Service and Research is a research and service agency operating in close coordination with the academic program of the University. It provides research, consulting, and training assistance to government agencies at the local, state, national, and international levels. The focus of the Institute is upon interdisciplinary public policy and the application of academic knowledge to the practical problems confronting government decision-makers.

Intensive English for Internationals (ESL)

The intensive English language program has been developed to meet the needs of internationals in Memphis, the surrounding area, and from abroad. English language instruction for non-native speakers of English is offered at the beginning, intermediate and advanced levels. For students coming from abroad, the program follows the university calendar for the fall and spring semesters. There is an eight-week session offered during the summer. Internationals residing in the local area can enroll for shorter periods of time. Classes designed to meet special needs can also be arranged outside of those regularly scheduled.

International Studies and Study Abroad

The Office of International Studies makes information available to students and faculty interested in international programs including student exchanges and study abroad. For additional information, please refer to *Independent Departments and Programs*, International Studies.

Regional Economic Development Center

The center represents the university in its outreach function in the field of economic development planning. In providing technical and management assistance to the public and private sectors, the center also serves as a laboratory for interdisciplinary research and service by faculty and graduate students in solving problems of urban and regional development. The center's professional planning staff have academic appointments and teach courses in urban and regional planning.

Speech and Hearing Center

Located at 807 Jefferson Avenue in the medical center of Memphis, this facility became affiliated with the university in 1967. It serves children and adults with communication disorders. The university administers and operates the center in cooperation with the Board of Directors of the Memphis Speech and Hearing Center, Inc.

Other Research Units

In addition to separately-budgeted units, Memphis State University also recognizes a wide array of other research-oriented units:

Anthropological Research Center
 Barbara K. Lipman Early Childhood Center and Research Institute
 Center for River Studies
 Center for Economic Education
 Center for Environmental and Energy Education
 Center for Health Services Research
 Center for Life Cycle Studies/Aging
 Center for the Study of William Blake
 Center for Voluntary Action Research
 Ecological Research Center
 Edward J. Meeman Biological Field Station
 Neuropsychology and Evoked Potential Laboratory
 Office of International Studies
 Oral History Research Office
 Public Sector Labor Relations Center
 Robert Wang Center for International Business
 Southern Music Archive
 Transportation Studies Institute

Recognized Centers and Chairs of Excellence

Memphis State University has been designated by the Tennessee Higher Education Commission as location for centers and chairs of excellence. The units listed below receive special funding by the State in recognition of their status.

Centers of Excellence
 Center for Applied Psychological Research
 Center for Earthquake Research and Information
 Center for Research Initiatives and Strategies for the Communicatively Impaired
 Center for Teacher Education
 Institute for Egyptian Art and Archaeology

Chairs of Excellence
 Accounting (2)
 Art History
 Biomedical Engineering
 Computer Engineering
 English Poetry
 Finance
 Free Enterprise Management
 International Business
 International Economics
 Judaic Studies
 Law
 Molecular Biology
 Nursing
 Philosophy
 Real Estate
 Sales

Center for Instructional Service and Research

The primary mission of the Center for Instructional Service and Research (CISR) is to provide support for the instructional programs of Memphis State University and

for some related academic activities of the faculty and staff. Located in the John Willard Brister Library Building, CISR provides services through its three divisions: the Learning Media Center, Graphic Design and Production, and Evaluation and Computer Services.

Faculty, staff, and graduate teaching assistants who wish to check out programs and equipment or to order graphics must present a valid MSU ID card at the LMC desk when equipment and/or material are checked out or to the graphic artist when work is requested. Eligible users may check out equipment and media for use in courses they teach, but not for courses in which they are enrolled.

The Learning Media Center (LMC) maintains the university's collection of instructional audiovisual programs in a variety of formats, including 16mm films, audiotapes, video cassettes, sound-slide and sound-filmstrip sets, and some computer software. Equipment is available for faculty use in the classroom. Services provided by the LMC include instruction on equipment operation, limited audio and video tape duplication within the provisions of the copyright law, assistance in locating information about audiovisual programs and identifying appropriate media for a given course, and arranging previews for purchase consideration. Students, faculty, and staff may view most programs in the LMC; conditions for use of all programs are governed by the provisions of copyright law (Title 17 U.S. Code).

Although the most frequently requested service provided by Graphic Design and Production for faculty and staff is the preparation of graphics for overhead projection transparencies, service ranges from drymounting and laminating instructional material to presentation posters. Photostatic copies for publication and specifications for materials to be typeset at Printing Services can be provided. Charts and graphs for university publication and/or representation, along with design and illustration for similar purposes, are also offered. Material and information necessary for the job must be delivered in person a minimum of two weeks before the completed work is required.

Evaluation and Computer Services conducts the university program for student evaluation of instruction, collecting, analyzing, and reporting student perceptions of classroom instruction. Each fall and spring semester, faculty are offered the opportunity to participate and to indicate classes to be surveyed. After the semester ends, the completed forms and a computer summary of student reactions are returned to the faculty. These documents, which form an important part of the dossier prepared for promotion and tenure, provide information useful to individual faculty in on-going course development and improvement of instruction.

On the balcony above the Learning Media Center, a laboratory with personal computers and printers is available during

LMC hours for individual faculty, staff, and student use. Software may be obtained at the LMC desk. Assistance is available during limited hours, or by arrangement. Members of the faculty who wish to utilize technology in support of their instruction may request advice and assistance in the development of computer assisted instruction.

Evening Academic Services

The Evening Academic Services office provides the full range of academic services to evening and Saturday students normally available to regular day students. The services include career, vocational, personal, and change of major counseling; registration assistance; transcript request and evaluations; undergraduate and graduate withdrawals; course drop and add requests; financial aid, health service, and other referrals; admissions and readmissions counseling; orientation information; traffic and parking fees, decals and tickets.

Psychological Services Center

The Psychological Services Center is located on the first floor of the Psychology Building. It offers both psychological evaluations and therapeutic services to children and adults. For appointments or information, contact the center.

Memphis State University Press

The Memphis State University Press promotes the development and publication of scholarly books and works of interest to the general reader. The Press welcomes works of regional interest on Tennessee and the Mid-South. In emphasizing scholarly works, the Press gives preference to those of wide appeal to the academic community.

Planning and Public Service

The Division of Planning and Public Service has overall responsibility for the coordination and development of university outreach activities, the development and implementation of the University's Long Range planning effort, Computer Center operations, and Institutional Research. The services offered through this division are designed to support the teaching, research and service mission of the university and to increase the availability of university faculty and facilities to the general public. For more information about the range of services, contact the Office of the Vice President for Planning and Public Service.

Alumni

The Memphis State University National Alumni Association has offices located in the Alumni Center on campus. The staff serves the Memphis State University National Alumni Association and provides a communication linkage to the university for graduates and former students. The Alumni Association and staff also offer

special services for current students and serve as the sponsors for the university's Student Ambassador Board.

Development

The Office of Development serves as the catalyst and coordinator for private charitable financial support of Memphis State University's academic programs. With approximately 50 percent of the university's annual operating budget provided by the State of Tennessee, other income must be generated by student tuition, other fees, and through annual and endowed gifts from private individuals and corporations. Such income is used to initiate new academic programs and enrich existing ones.

Planning

The division is responsible for coordinating the university-wide planning function to insure that the institution's resources and efforts are directed to the accomplishment of its mission. Programs and resources are constantly monitored and kept current through ongoing analysis of the internal and external environments in which the university functions.

Public Service

In recognition of the university's responsibility to serve the needs of a changing social and economic order, the Office of Public Service serves as a prime contact for individuals and organizations outside the university. Through this office, access may be gained to university facilities and resources.

Tennessee Small Business Development Center

The Tennessee Small Business Development Center is organized to provide business development services to new and existing small business firms throughout the State of Tennessee. These services are delivered through sub-centers located at various state universities, community colleges, and technical institutes. These services add to the economic development efforts of the local communities by adding and retaining employment. Special attention is given to women, minority, and veteran owned businesses.

THE GRADUATE SCHOOL

The *Graduate School* of Memphis State University is the center of advanced study and research within the university. The basic objectives of the *Graduate School* are as follows:

1. to preserve and disseminate knowledge;
2. to extend knowledge through research; and
3. to prepare men and women to assume responsible and useful roles in a changing society.

The Doctor of Philosophy degree is awarded in audiology and speech pathology, biology, business administration, chemistry, counseling psychology, engineering, history, mathematics, music, philosophy, and psychology. The degrees of Doctor of Education and Doctor of Musical Arts are awarded by the College of Education and the College of Communication and Fine Arts, respectively. The College of Education also offers the degree of Education Specialist in several of its departments. The Cecil C. Humphreys School of Law offers the Juris Doctor degree.

Master's degrees are offered in fifty-four major areas through five colleges and one independent department. The degrees include Master of Science, Master of Arts, Master of Fine Arts, Master of Arts in Teaching, Master of Education, Master of Business Administration, Master of Music, Master of City and Regional Planning, and Master of Public Administration.

For students with specific and valid educational goals that cannot be satisfied by existing programs, an individual studies major leading to an M.S. or M.A. is coordinated by the Graduate School.

CECIL C. HUMPHREYS SCHOOL OF LAW

PROGRAM: The Cecil C. Humphreys School of Law offers a program of instruction leading to the degree of Juris Doctor. A student may enroll only in the fall semester and on a full-time or part-time basis. A student regularly employed more than 20 hours per week may not pursue the full-time program.

The successful completion of 90 semester hours of work, including all required courses, with the prescribed grade average is necessary for graduation. Unless an exception is granted, the last two regular semesters' work must be taken in this school.

ADMISSION: Admission to the Cecil C. Humphreys School of Law is on a selective basis. To be eligible for admission, a student must have received a bachelor's degree from an accredited college or university and must have made a satisfactory score on the Law School Admission Test administered by the Law School Admissions Services, Box 2000, Newtown, PA 18940. Questions concerning additional admissions requirements should be directed to the Director of Law Admissions and Recruitment.

The regulations and policies of the School of Law are set out in greater detail in a separate issue of the *Law School Catalog*. Additional information may be obtained from the Director of Law Admissions and Recruitment, Room 201, Law Building.

2. ADMISSION REQUIREMENTS

ADMISSION TO THE UNIVERSITY

Memphis State University offers equal educational opportunity to all persons without regard to race, religion, sex, creed, color, national origin, or handicap. Inquiries about admission to any college of the University should be addressed to the Office of Admissions. This office receives and processes all applications, evaluates credentials, and issues notices of acceptance to qualified students. Undergraduate students may enter at the beginning of either the regular semesters or at the beginning of any term of the summer session.

All applications must be accompanied by a five-dollar (\$5.00) non-refundable application fee. This fee is payable one time only for undergraduate and graduate level applicants. Law applicants, however, must pay a separate fee.

Certain instructional programs of the university are subject to special admission requirements and are subject to change according to the availability of institutional resources. Students wishing to enter one of these programs of study should check with the appropriate department or division offering the program in order to become familiar with these special requirements. Undergraduate programs with special admission requirements include, but are not limited to, professional degrees in art, music, or theatre (Bachelor of Fine Arts or Bachelor of Music), teacher education, educational services, nursing, and the University College.

Applicants are advised to have all credentials on file well in advance (preferably thirty days) of the registration period for the term for which their application is made. All credentials become the property of the university and cannot be forwarded or returned.

Credentials will be maintained in active files for a 12 month period. After this period, credentials will be relegated to inactive status and must be submitted again before an admission decision can be made.

Regulations in this section are subject to change without notice.

ADMISSION AS REGULAR UNDERGRADUATES

Freshmen Applicants

The deadlines for submitting applications for admission are: August 1 for the fall semester; December 1 for the spring semester, and May 1 for the summer

session. Applications received after these deadlines may be delayed in processing.

An applicant who has *no* previous college enrollment may qualify for admission as a regular undergraduate freshman by meeting the following requirements:

1. HIGH SCHOOL GRADUATION

A. By submitting a transcript of credits showing graduation from a state approved or regionally accredited high school. Graduates of an unapproved or non-accredited high school must take the General Educational Development (G.E.D.) test and earn an average standard score of at least 45. This G.E.D. requirement is waived for students who earn the minimum A.C.T. required for guaranteed admission. However, for students who graduated in 1989 or thereafter from an unapproved or non-approved high school and are deficient in one or more of the required high school courses, the G.E.D. may be advisable. Students who do not present one unit of American History are required to register for the course during their first or second year at the university. Students who do not present two units of appropriate high school mathematics courses i.e. two years of algebra or one year of algebra and one year of geometry, are required to take a mathematics placement test. A student's score on this test will determine the first mathematics course: R&DS 0720, 0820, or 0821. This sequence must be completed prior to enrolling in a mathematics course applicable toward a degree.

NOTE: Graduation means completion of a course of study which results in the award of a diploma, not a certificate of attendance or completion. If a proficiency or competency examination is required to award such diploma, a notation of satisfactory performance must be included on the transcript. Students graduating from high school in 1989 or subsequent years are also subject to the high school curriculum requirements found at the end of this section of the Catalog.

OR

B. By General Educational Development Test (G.E.D.). Applicants 18 years of age or older who are not high school graduates may satisfy the graduation requirements by submitting G.E.D. scores averaging 45 or more. Testing may be arranged by contacting the local Board of Education.

2. ENTRANCE EXAMINATIONS

Applicants must submit acceptable scores earned on the test administered by the American College Testing Program (A.C.T.). These scores must be sent directly from the testing agency (American College Testing Program, P.O. Box 451, Iowa City, Iowa, 52243). Applicants who are 21 years of age or older or were a member of a high school class which graduated at least three years prior to the intended term of entry may submit for consideration a statement of educational goals in lieu of an entrance examination score. Students are urged to visit or telephone the Office of Admissions for additional information or clarification of test score requirements. Special testing arrangements may be made for handicapped persons by contacting the Director of Handicapped Student Services.

NOTE: In cases involving the availability of the A.C.T. or the timeliness of a test administration, the S.A.T. may be considered.

3. ADMISSION DECISION

Acceptance to the university for in-state applicants, may be granted as follows:

A. Guaranteed Admission

Minimum A.C.T. composite score of 20 on the enhanced ACT or the equivalent on the former ACT **OR** a 3.0 cumulative grade point average on a 4.0 scale from an accredited or approved high school and satisfactory completion of the required high school curriculum.

B. Reviewed by Committee

Applicants with an A.C.T. composite score of 19 on the enhanced ACT or the equivalent on the former ACT **OR** at least a 2.0 cumulative high school grade point average on a 4.0 scale may be considered for

admission by committee. Applicants who fall into this category should also submit the following:

(1) Personal Statement: a letter written by the applicant to the committee including the following —

(a) an outline of activities in high school and extra curricular activities (employment, etc.); (b) personal interests, and (c) reasons the applicant wants to attend college and specifically Memphis State University.

(2) Recommendations from at least one of the following: counselor, principal, or teacher. In the absence of special talents or circumstances, applicants who do not meet the requirements in A or B above will be rejected (see section C below).

NOTE: Applicants who are offered admission with ACT composite scores less than 19 on the enhanced ACT or the equivalent on the former ACT will be required to take a placement examination prior to enrollment. Based on the results of this assessment, these applicants may be required to successfully complete remedial and/or developmental courses prior to enrolling in degree credit courses. Applicants who are offered admission with an ACT composite score more than 18 on the enhanced test or the equivalent on the former test but whose math or English subscore is less than 19 on the enhanced test or the equivalent on the former test will be required to take a placement test to determine course placement prior to enrollment in the first math or English course. See Developmental Studies program description in the *Independent Programs* section of this catalog.

C. Special Talents or Circumstances

Applicants with special talents or circumstances who do not meet requirements for guaranteed admission or for committee review may be considered. For further information contact the Office of Admissions. Applicants with diagnosed learning disabilities should contact the Director of the Office for Student Disabilities for further information.

4. OUT-OF-STATE APPLICANTS

Acceptance to the University for out-of-state applicants who meet guaranteed admission standards may be granted on the same basis as for in-state applicants. Acceptance for all other out-of-state applicants is competitive.

Transfer Applicants

The deadlines for submitting applications for admission are: August 1 for the fall semester; December 1 for the spring semester; and May 1 for the summer session. Applicants who apply after these deadlines will be processed in one of the special categories listed in the Special Category Applicants section which follows.

An applicant who has registered at any accredited college or university must apply as a regular undergraduate transfer student or in the appropriate special category. In order to qualify for regular transfer admission, the applicant must request that a transcript from each institution attended be sent directly to the Office of Admissions. Transfer applicants who graduated from high school in 1989 or later may also be subject to the high school curriculum requirements found at the end of this section of the catalog. In order to make this determination, a high school transcript is necessary.

Therefore, all transfer applicants whose high school graduation date was in 1989 or later should have a transcript mailed

directly from their high school to the Admissions Office. Concealment of previous college or university attendance may be cause for rejection or cancellation of admission.

Admission may be granted to applicants who have honorable dismissal from the last institution attended and whose cumulative quality point average (Q.P.A.) meets the required minimum established by the Tennessee State Board of Regents, as stated below:

Semester Hours Attempted	Minimum QPA
14.99 or less	No minimum*
15.00 — 29.99	1.40
30.00 — 50.99	1.70
51.00 — 67.99	1.90
68.00 and above	2.00

*Transfer applicants with fewer than 15.00 earned semester hours must meet the admission requirements for freshman applicants.

Transfer applicants who have been academically dismissed from the last institution which they attended, or do not meet the Q.P.A. requirements listed above, will not be considered for admission until at least one regular semester (not to include summer sessions) has elapsed. After this period, these applicants must provide the following:

A. a new application, (no additional fee required)

B. an acceptable A.C.T. or S.A.T. score
NOTE: Applicants who are 21 years of age or older or were a member of a high school class which graduated at least three years prior to the intended term of entry may submit for consideration a statement of educational goals in lieu of an entrance examination score.

If acceptance to the university is granted, the applicant will be admitted on academic probation.

Transfer applicants who are denied admission should contact the transfer affairs section of the Office of Admissions to discuss the possibilities of attending the university in the future.

International Students

Memphis State University believes that the presence of a balanced representation of international students on campus will enrich the educational environment of all students. Based on this, the university is authorized under federal law to enroll non-immigrant, alien students on "F-1" and "J-1" student visas. Applicants must file complete credentials before May 1 for fall admission; September 15 for spring admission; or February 1 for summer admission. Complete credentials include all the documents listed below under requirements.

The application should be completed carefully and returned to the Office of Admissions, Memphis State University, Memphis, Tennessee, 38152, U.S.A. Applications and fees received after the stated deadlines will be returned.

A non-refundable application and processing fee of \$30.00 (thirty dollars) is required of every international applicant,

unless previously paid. A check or money order, made payable to Memphis State University, must be sent with the application form. Applications received without the fee will be returned.

International applicants should write to the Office of Admissions for information on application procedures, qualifications, and admission to the university. Since there is considerable variation among educational systems throughout the world, international applicants will be selected on a competitive basis, after meeting the minimum standards of admission using examination scores, grade point average, relevance of academic background to intended major field of study and recommendations from the World Education Series. The university often receives more applications than can be approved; therefore, admission cannot be granted to all applicants who meet only the minimum requirements.

Since the enrollment of international students is based on a global sampling and representation, priority will be given to applicants with exceptional credentials who will be attending a university in the United States for the first time.

All transcripts, test scores, and other credentials must be accompanied by an official English translation of these documents and must be on file in the Office of Admissions by the stated deadlines prior to the beginning of registration for the intended term of entry.

REQUIREMENTS

1. Educational Background: The applicant must list on the form provided by the university every school attended, beginning with primary school, to the present, including each primary, secondary, and post secondary institution.

2. Required Transcripts: The applicant must arrange for the Office of Admissions to receive official copies of academic records from the applicant's attendance at secondary school, college, university, and professional institutions of learning. These transcripts must be sent directly from the high school or college to Memphis State University. An exception is made for those who hold the bachelor's degree or its equivalent in that they need not send their secondary school records. Records should list the subjects studied and the grade, mark, or other evidence that each individual subject was completed to the satisfaction of the authorities in charge. If it is impossible for the school to send us an official copy, certified copies by an official at the American Embassy or a known world organization may be acceptable. All records must be in English. Since certificates and records filed for examination are not ordinarily returned, the applicant should send certified photostatic copies if the documents in question cannot be easily replaced.

3. Required Test of All Applicants: All applicants whose native language is not English must supply results of the Test of English as a Foreign Language (TOEFL) or its equivalent. TOEFL information may be obtained by writing, TOEFL, Educational Testing Service, Princeton, New Jersey, 08540, U.S.A. All test scores must be sent directly from the testing agency to Memphis State University.

4. Freshman Test Required: Applicants to the first year undergraduate level must submit scores on the Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT). These tests are available only in English. For information on the SAT, the applicant may write to College Entrance Examination Board, Box 592, Princeton, New Jersey, 08540, U.S.A. For information on the ACT, the applicant may write to American College Testing Program, P.O. Box 414, Iowa City, Iowa, 52243, U.S.A. All test scores must be sent

directly from the testing agency to Memphis State University.

5. Financial Statement. U.S. visa regulations require that certification of admission be based on both academic acceptance and satisfactory evidence of adequate funds to meet the expenses involved in the student's program of study. An applicant on an "F-1" student visa must supply, on the form provided by the university, sufficient evidence of financial support for the applicant and all members of his/her family who will accompany the applicant to Memphis. This requires that the applicant certify that his/her intent is to attend the university full-time and that no employment will be required.

6. The applicant must send two recent passport size photos of himself to the Office of Admissions, Memphis State University, Memphis, Tennessee, 38152, U.S.A.

7. Health Certificate Required: Each international student, within 30 days from the first day of classes, must submit a certificate from a licensed U.S. physician or other qualified U.S. medical authority verifying freedom from tuberculosis. Failure to do so shall result in denial of enrollment. In the event that the student either has tuberculosis or has potential tuberculosis requiring medical treatment, continued enrollment will be conditioned upon the determination by a licensed U.S. physician that such enrollment does not present a risk to others and upon the student's compliance with any prescribed medical treatment program.

8. All international students must purchase health insurance before they are allowed to enroll.

9. English Placement Examination: All international applicants who are accepted must take an English placement examination, administered by the English Department, prior to enrollment. Placement in an English class will be determined by the results of this examination. International students should arrange to be on campus approximately one week prior to the beginning of Regular Registration for the proposed term of entry.

10. International students will not normally be allowed to register as transient students (those regularly enrolled and in good standing at another institution who desire to attend Memphis State for only a limited period of time). During summer sessions, exceptions may be granted only in cases where a student has an outstanding academic record and unusual circumstances are present.

11. International students who wish to apply for readmission to the university must meet the deadlines stated above.

12. The international student must become familiar with the regulations of the Immigration and Naturalization Service and assume responsibility for complying with these regulations.

SPECIAL CATEGORY APPLICANTS

Applicants who wish to apply in one of the special categories listed below are encouraged to apply by the deadlines as stated for Regular Undergraduates. Applications will be accepted until the first day of regular registration for the term for which the student is applying. Special category students who have attended other colleges will not have their previous college work evaluated for transfer until such time as they have been approved for admission as regular undergraduates. An applicant who has applied as a regular undergraduate and failed to meet admission requirements must wait one regular semester or six months before applying for admission in any special category.

Special Undergraduate Applicants

An applicant who has (1) earned a baccalaureate degree from an accredited institution (2) who desires to take only a limited number of undergraduate courses, and (3) who is not presently working toward a degree at Memphis State University may be admitted as a Special Undergraduate Student by providing proof of the degree held and the date it was earned.

Unclassified Applicants

An applicant who wishes to enter the university, and is not presently pursuing a degree, may do so by applying for admission as an unclassified student and meeting one of the two conditions listed below:

1. An applicant who has not attended another college or university must:

A. provide proof of high school graduation or the equivalent OR

B. be at least 18 years of age and not a current year high school graduate.

C. Applicants who are offered admission with ACT composite scores less than 19 on the enhanced ACT or the equivalent score on the former ACT and who wish to take an English or a mathematics course, will be required to take a placement examination prior to enrollment. Based on the results of this assessment, these applicants may be required to successfully complete remedial and/or developmental courses prior to enrolling in degree credit courses.

NOTE: Those applicants under 21 who complete their high school work during the calendar year in which they seek admission will not be considered in the unclassified category. These applicants must apply as regular undergraduate freshman.

2. A student currently/Previously enrolled in an accredited college or university must submit evidence of eligibility to re-enroll at that school. Clearance will be for one term only. Subsequent enrollment will require an application for readmission.

NOTE: Transient students (those regularly enrolled and in good standing at another institution who desire to attend Memphis State for only a limited period of time) should apply in the unclassified category.

Those applicants who are admitted as unclassified students are assigned to the Academic Counseling Unit for advising. Students in this category may not take more than 18 semester hours of work in a single term nor may they earn more than 24 semester hours total. This limit may be extended if there has been enrollment at another institution since last attending Memphis State.

The unclassified student may, at any time within the stated deadlines, apply to the Office of Admissions for reclassification as a regular student, effective at the beginning of the next regular semester. Admission procedures and requirements are the same as those for regular undergraduate applicants with the following clarifications:

1. An acceptable entrance examination score or the equivalent may be required for students who wish to be reclassified.

A. Applicants who are 21 years of age or older or were a member of a high school class which graduated at least three years prior to the intended term of entry, may be reclassified by earning a cumulative O.P.A. of 2.00 which must include 12 hours or more of non-activity courses at Memphis State and may submit for consideration a statement of

educational goals in lieu of an entrance examination score.

B. Applicants who are less than 21 or were members of a high school class which graduated less than three years prior to the intended term of entry may be reclassified by earning a cumulative O.P.A. of 2.00 which must include 12 semester hours or more of non-activity courses at Memphis State, but must take the examination.

NOTE: Courses defined as remedial or developmental may not be used in satisfying the 2.00 requirement.

2. The high school graduation requirement may be satisfied by any of the methods listed in the regular undergraduate freshman section of this catalog.

After the student is admitted as a regular undergraduate, any credit that may have been earned as an unclassified student may apply toward degree programs in the college from which a degree is sought as outlined in this catalog.

Concurrent Enrollment

Outstanding high school students who have completed the junior year may be admitted and register for one college course per term of enrollment concurrently during their senior year provided they supply evidence of the following:

1. A minimum high school cumulative grade point average (G.P.A.) of 3.20 on a 4.00 scale.

2. An ACT composite score of 22 or above on the enhanced ACT or the equivalent on the former ACT.

3. A recommendation from the applicant's high school principal or guidance counselor.

4. The course a concurrently enrolled student registers for must be taken outside of his or her established school day.

NOTE: Departments may establish additional criteria for their courses.

Early Admission

Academically outstanding high school juniors who have completed three academic years of high school, accumulating at least 14 units of course work may be considered for early admission if they have the following:

1. A minimum high school cumulative grade point average (G.P.A.) of 3.5 on a 4.00 scale.

2. A minimum ACT composite score of 26 on the enhanced ACT or the equivalent on the former ACT.

3. Written recommendations from high school principal and guidance counselor.

4. An interview with MSU faculty/staff committee selecting early admission students.

In addition, they must agree to enroll in freshman English, and, unless successfully completed in high school, courses in American history and economics.

NOTE: Early admission applicants should also check with their high school for specific graduation requirements.



Audit Students

Persons who are not enrolled for credit courses may register for audit courses with the approval of the Office of Admissions and the appropriate department chair. These students must have the equivalent of high school graduation or be at least 18 years of age. Clearance will be for one term only. Subsequent enrollment will require an application for readmission. Those who are suffering from a permanent disability which totally incomplicates them from working at an occupation which brings an income, and persons sixty years of age or older, who are domiciled in Tennessee, may audit courses at Memphis State without paying tuition charges, maintenance fees, student activity fees, or registration fees. Admission to audit will be limited on an individual classroom basis according to space availability.

Mini College

Mini College is a special entry and re-entry program for adults who are entering college for the first time, or for those who are returning after being out of school for any number of years. It is designed to familiarize the non-traditional student with the academic programs and services available and to provide individual assistance in the admissions and registration procedure. Admission requirements are the same as those for the undergraduate application categories described earlier in this section.

Each fall and spring semester, Mini College offers a schedule of basic, entry level credit courses. Most classes meet just once a week and are scheduled at convenient times, both day and evening, for the part-time student.

A student electing to take Mini College courses will receive regular credit and will attend classes with other returning adult students. For further information, contact the Mini College Office.

Combination Senior

An undergraduate senior student with a total cumulative GPA of at least 3.25 and who is enrolled in the last term of course work at Memphis State University that will complete the requirements for a bachelor's degree, may request approval to enroll concurrently in undergraduate and selected graduate courses. The Combination Senior student is not considered a graduate student and may take no more than (9) departmentally approved graduate semester hours. After the bachelor's

degree has been awarded, the Combination Senior may apply for admission to The Graduate School.

FORMER STUDENTS (READMISSION)

Former students who wish to return to the University in the same category as when they previously attended or in any special category must file an application for readmission. This form should be secured, completed, and returned to the Records Office. If the student has enrolled at another institution since last attending Memphis State University, a transcript must be forwarded to the Admissions Office. An applicant will receive favorable consideration only if eligible for readmission under all university regulations, including the quality point average (Q.P.A.) for transfer students. (NOTE: International students who wish to apply for readmission to the university must meet the deadlines for new admission for international students.)

HIGH SCHOOL CURRICULUM REQUIRED FOR ADMISSION TO THE UNIVERSITY ENTERING CLASS OF 1989 AND LATER

No high school curriculum can assure that a given student will acquire desired learning outcomes; however, the absence of certain components greatly increases the likelihood that the student will not acquire those outcomes and reduces the likelihood that the student will enjoy maximum benefits of a college experience. The justification for colleges' recommending or requiring specific high school units for admission is to reduce the likelihood that a student will be unprepared for effective work in college and to increase maximum benefits a student may enjoy.

Effective the Fall Semester 1989, among the units required for graduation, the following specific high school units must be included in the minimum admissions requirements at all Tennessee State Board of Regents universities and colleges. **Students who do not take one or more of these required courses, where they are available, may not be eligible for admission to the University.**

ENGLISH (4 units required): Units in this category must address reading and literature, writing, speaking and listening, and principles concerning the English language. Extensive experience in reading and writing should characterize all courses.

VISUAL AND/OR PERFORMING ARTS (1 unit required): Units in this category should include a survey of the arts (visual arts, theatre, music, and dance) or active participation in one or more of the arts. NOTE: This requirement has been waived for Fall 1989, Spring 1990, and Summer 1990.

MATHEMATICS (3 units required): Units in this category must include Algebra I, Algebra II, and geometry or an advanced course with geometry as a major component. Students are recommended to take a fourth unit in computing, advanced mathematics, or statistics. All college freshmen will benefit by having studied mathematics as seniors.

NATURAL AND PHYSICAL SCIENCES (2 units required): Units in this category must include mathematical skills, fundamental concepts, and some laboratory and field work. At least one unit must address detailed knowledge in the more traditional fields of biology, chemistry, or physics and must include a laboratory.

SOCIAL STUDIES (2 units required): Units in this category may include history, government, geography, economics, sociology, psychology, or anthropology. One unit in U.S. history is required.

FOREIGN LANGUAGE (2 units required): Two units in a single foreign language are required in this category.

These stipulated high school units are not intended to specify what the total high school curriculum should be. Secondary schools seek to meet the needs of various student clienteles, one of which is the college-bound student. The stipulations are, on the other hand, an attempt to make a strategic application of academic competencies. They reflect the bridge from specific desired learning outcomes to a list of required college admission criteria. That list is comprised of high school units presumed most likely to result in the required learning outcomes. For the sake of clarity, one unit constitutes one year of high school study of a given subject.

Applicants with subject deficiencies who are from high schools not offering all the required subjects may, with proper institutional approvals, be admitted to the university; however, the deficiencies must be removed during the first 64 semester hours of college enrollment, and courses required to remove them will be used only for elective credit. Different requirements may be specified for special categories of applicants: adult students (i.e., students separated from high school graduation by five or more years), GED students who are not high school graduates, and international students. Transfer and re-entry students may be required to remove any deficiencies prior to regular admission.

3. EXPENSES AND AID

FEES AND CHARGES

GENERAL: The information in this section concerning tuition, fees, deposits, etc., is applicable only to students enrolled in the undergraduate colleges and departments of the university. Similar information for students in The Graduate School and The School of Law is available in the catalogs of those schools.

The listing of any fee or incidental charge in this catalog does not constitute a contract between the university and the student. The fee amounts listed below are for the 1989-90 academic year. Fees are expected to increase somewhat for the 1990-91 academic year. **Because of rapidly changing conditions it may become necessary to alter a fee structure before the next edition of the Catalog is published.** As a condition of registration, each student will pay the fees in effect the semester for which he or she registers.

All fees and charges will be assessed and calculated consistent with policies and procedures of the university and the Tennessee Board of Regents. Information presented in this catalog is intended to cover the situations most students will encounter. The university may have additional policies and procedures by which fees and charges are implemented or which apply to unusual situations.

INDEBTEDNESS TO UNIVERSITY: Policy of the Tennessee Board of Regents prohibits the enrollment of any person who owes the university any amount of money. All outstanding financial obligations to the university must be satisfied before the first day of classes to avoid deletion of the student from the class rolls. Tennessee law prohibits the release of grades, transcripts or diplomas of any person has outstanding financial obligations to the university.

APPLICATION AND REGISTRATION FEE INFORMATION

APPLICATION FEE: Each student submitting an application for admission to the university must pay, at the time of submitting their first application, a one-time, non-refundable fee of \$5.00.

PAYMENT OF FEES AND DEBTS: Fees may be paid by cash, check, money order, or through the use of Visa or Mastercard. Fees may be paid as soon as the student receives a Class Schedule and Invoice Form. However, all fees must be paid by the deadline as indicated on the student's Class Schedule and Invoice Form. All

deadlines are noted in the fee deadline section and term calendar of the *Schedule of Classes*. Registration is not complete and students will not have their names placed on class rolls until after all fees are satisfied. Former students with outstanding financial obligations to the university cannot be re-enrolled until the obligations are paid.

MAINTENANCE FEE: All students, whether in-state or out-of-state, pay a maintenance fee. Undergraduate fees are \$59.00 per semester hour, not to exceed a maximum of \$681.00. Maintenance fees assessed are based on the course level, and the maximum fees will be the graduate maximum if a student is enrolled for any graduate hours. Graduate Maintenance Fees are \$82.00 per credit hour, not to exceed a maximum of \$833.00.

Fees for auditing courses will be assessed on the same basis as fees for credit courses. Courses offered between terms, for concentrated periods during a term, or at specific locations, may be subject to fees on a per-hour basis only.

The university will usually collect the amount of fees due at the time of registration and during the adding and dropping of classes, in accordance with the residency classification and fee rates in effect. After all enrollments are complete, any over-collection will be refunded, and students will be billed for any under-collection.

THE SUMMER SESSION: The summer session consists of two separate terms of approximately six weeks each, plus an extended term for specified courses. Fees for the summer session are determined solely on a semester hour basis. The semester hour charge is \$59.00 for maintenance fees and an additional \$129.00 for out-of-state tuition.

TUITION: Students classified as out-of-state are charged an additional \$1,477.00 per semester for full-time students or \$129.00 per semester hour for part-time students. Thus, an out-of-state full-time student is charged \$2,158.00. An out-of-state student who is enrolled part-time is charged \$188.00 per semester hour.

Residency Classification: All determinations concerning the classification of students as in-state or out-of-state for fee purposes are made in the Office of Admissions by the Residency Advisor. The determinations are based on the regulations and guidelines of the Tennessee Board of Regents. If, for any reason, there is a question about a student's residency classification for fee-paying purposes, it is his or her responsibility to check with the Residency Advisor.

ACADEMIC COMMON MARKET: The Academic Common Market is a program designed to help students in the south cut

the cost of tuition for attending out-of-state institutions. The arrangement between the 13 Southern States (Ala., Ark., Fl., Ga., Ky., La., Md., Ms., S.C., Tx., Va., and W.V.) allows qualified students to pay in-state fees while attending Memphis State University.

There are only two requirements. (1). Proof that the student is a legal resident of a participating state. (2). Acceptance to Memphis State University and to the major which has been approved for participation by the student's state. Please write the Residency Office at Memphis State University for further information.

FEES FOR TOTALLY DISABLED PERSONS AND PERSONS OVER 60 YEARS OF AGE: Persons suffering from a permanent disability which totally incapacitates them from working at an occupation which brings them an income, and persons who will become 60 years of age or older during the academic semester in which they begin classes, and who are domiciled in Tennessee, may AUDIT courses at Memphis State University without paying tuition charges, maintenance fees, student activity fees, or registration fees. Admission to AUDIT will be limited on an individual classroom basis according to space availability.

Any person who is totally disabled, and persons who will become 65 years of age or older during the academic semester in which they begin classes, and who are domiciled in Tennessee, may enroll for courses for credit at the cost of \$29.50 per undergraduate semester hour, or \$41.00 per graduate semester hour, not to exceed \$75.00 per semester. The University Health Services shall examine certification of permanent disability (not the applicant) and determine the eligibility of the applicant under this legislation.

Inquiries concerning these programs may be addressed to the Registration and Scheduling Office, Room 161, Administration Building.

STUDENT ACTIVITY FEES: All students enrolled for one to five credit hours will pay a student activity fee of \$3.00 per hour. All students enrolled for six or more credit hours will pay a student activity fee of \$45.00.

Students paying the fee for six or more hours are entitled to admission to home athletic events and certain health services, concerts, plays, social and other student-sponsored activities, and a subscription to the student newspaper, *The Helmsman*. Student activity fees for the summer session are determined solely on a semester hour basis.

REFUND OF FEES: The following refund percentages apply to students who withdraw from the university or who drop to an hourly load below full-time:

(MAINTENANCE FEES, OUT-OF-STATE TUITION, MUSIC FEES)

A. 100% Refund: (1) A full (100%) refund of these fees will be provided for courses cancelled by the university. (2) A full (100%) refund of these fees will be provided beginning at the moment of Priority/Continuous Registration and extending until the conclusion of the Regular Registration. (3) A full (100%) refund of these fees will be provided in the case of death.

B. 75% Refund: A 75% refund of these fees will be provided beginning with the conclusion of Regular Registration and extending for a period of time as noted in the term calendar for each semester.

C. 25% Refund: A 25% refund of these fees will be provided beginning at the expiration of the 75% refund period and extending for a period of time as noted in the term calendar for each semester.

(STUDENT ACTIVITY FEES):

A. A full (100%) refund of the Student Activity Fee will be provided beginning at the moment of Priority/Continuous Registration and extending until the conclusion Regular Registration.

B. During the normal 75% refund period, a 90% refund of the Student Activity Fee will be provided.

C. During the normal 25% refund period, a 75% refund of the Student Activity Fee will be provided.

D. After the end of the normal 25% refund period, there will be no refund of the Student Activity Fee.

The university's refund policy is based entirely upon the official date of the withdrawal or change of course which would result in a refund. Refunds beyond the specified date or percentage will not be made for reasons such as employment conflicts, health or medical problems, moving out of town, or other reasons which are beyond the university's control or responsibility.

Note: The dates for these refund periods are found in the term calendar in the *Schedule of Classes*. The refund period ends earlier than the final deadline for dropping a course or withdrawal.

Refunds will be processed beginning approximately two weeks after classes begin and usually should be completed five weeks after classes begin. The University will offset against proposed refunds any amount owed by the student to the university.

STUDENT HOUSING

RESIDENCE HALLS: Charges for rooms in university residence halls are indicated below.

APPLICATION PROCEDURES: Applications for residence hall space may be obtained from the Office of Residence Life, M.S.U., Memphis, Tennessee, 38152.

Because spaces are allocated by date of receipt and home address, completed applications accompanied by the required \$100 application/reservation deposit should be returned to the Office of Residence Life as soon as possible. Checks or money orders should be made payable to Memphis State University; please do not send cash.

Receipt by the Office of Residence Life of the housing application and \$100 check or money order, however, does not guarantee admission to the university or to a residence hall. THE DIRECTOR OF RESIDENCE LIFE RESERVES THE RIGHT TO REFUSE ANY HOUSING APPLICATION, TO CHANGE OR CANCEL ANY ASSIGNMENT, OR TO TERMINATE A RESIDENT'S OCCUPANCY, FOR JUSTIFIABLE CAUSE.

CONTRACT PERIOD AND CONDITIONS: Fall assignments/contracts are for the full academic year (fall and spring semesters). Fall residents wishing to petition for release from their contract for the spring semester must do so in writing by November 1. Residents who cancel after this date, but prior to claiming their key for the spring semester, will forfeit 50% of their application/ reservation deposit. Residents who fail to cancel by 4:00 P.M. on the first day of check-in will forfeit the entire deposit. The application/reservation deposit, once submitted with the application, covers the student's initial term of occupancy and all subsequent terms of occupancy and continues until such time as it is cancelled in writing. There will be no penalty if written cancellation is received prior to the published deadline for any specific contract period.

Residents claim and vacate their rooms according to directions issued by the Department of Residence Life. Returning and new residents will have claimed their spaces if any or all of the following procedures have occurred: (1) receiving the room key during the check-in period, (2) paying residence hall rent in full or in part by the last day of regular check-in, (3) returning the signed contract with the rent payment.

CANCELLATION POLICY: Full application/reservation deposit and pre-payment of rent will be refunded if: (1) the institution is notified by the following cancellation deadlines for the first semester in which the contract is in force: July 1—fall residents; December 1—new spring residents; May 1—summer residents; (2) the student is prevented from entering the university because of personal medical reasons confirmed in writing by a licensed physician, (3) residence hall space is not available, (4) if the applicant has not been assigned to a room at the time his written cancellation is received by Residence Life, or (5) the student is denied admittance or readmittance to the university. Full refund will be made in the case of death. Fall residents wishing to petition for release from their contract for the spring semester must do so in writing by November 1. NO

REFUNDS WILL BE MADE FOR OTHER THAN THE ABOVE CONDITIONS.

Assigned residents who fail to cancel by the deadline referred to in (1) above but cancel before 4:00 P.M. on the first day of check-in will forfeit 50% of their deposit. Assigned residents who fail to cancel by 4:00 P.M. on the first day of check-in will forfeit their entire deposit. (This is applicable to both the fall and spring semesters.)

REFUND OF RESIDENCE HALL RENT: Refunds of residence hall rent after registration will be pro-rated on a weekly calendar basis when the student is forced to withdraw from the residence halls (1) because of personal medical reasons confirmed in writing by a licensed physician or (2) at the request of the institution for other than disciplinary reasons. Full refund will be made in the case of death.

For reasons other than the above stated, the following procedure shall apply: 75% of rent will be refunded for withdrawal from the residence halls for a period of approximately 14 calendar days beginning with and inclusive of the first official day of classes or within an equivalent period for a short-term course; 25% of rent will be refunded following expiration of the 75% period, for a period of time extending approximately 25% of the time covered by the term. The periods during which refunds of 75% or 25% will be made are exactly the same as the periods during which the same refund percentages are made for maintenance fees. NO REFUNDS WILL BE MADE FOR OTHER THAN THE ABOVE CONDITIONS.

Dormitory	Type Room	Semester Rate***
Browning	Double	\$540
	Single	750
Hayden	Double	795
	Single	1100
McCord	Double	565
	Single	785
Mynders	Double*	610
	Small	
	Single*	800
	Middle	
	Single*	835
	Large	
	Single*	860
	Large	
	Single**	885
Newport	Double*	740
	Single*	1030
Rawls	Double	660
	Single	920
Richardson Towers N.	Double*	720
	Single*	1000
Richardson Towers S.	Double*	720
	Single*	1000
Robison	Double	660
	Single	920
Smith	Double	565
	Single	785
West	Double	565
	Single	785

*Semi-Private Bath

**Private Bath

***Fees quoted are for 1989-90 Academic Year and are subject to change.

STUDENT FAMILY HOUSING: The university has 126 apartments for students with families located on South Campus, approximately one mile from the central part of the campus. There are 70 two-bedroom and 56 one-bedroom apartments. Some apartments are built specifically for handicapped students. All apartments are

furnished with electric stove, refrigerator, carpeting, and garbage disposals. The monthly rental rates are as follows: one-bedroom apartment, \$275; two-bedroom apartment, \$315. Electrical utilities are paid by the tenant. Rates quoted are for the 1989-90 academic year and are subject to change.

Application forms may be obtained from the Office of Residence Life. A \$100 deposit is required when the application is submitted.

MISCELLANEOUS FEES

ADDING AND DROPPING COURSES: A fee of \$5.00 will be charged, beginning with the first day of the Late Registration period, for each change of course form processed, regardless of the number of course or section changes included on the form.

AUTOMOBILE REGISTRATION: Each person who expects to operate and park any motor vehicle on the campus must purchase an official permit, which is valid for the semester, and register the vehicle in the Security Office, Room 151, Administration Building. Proof of ownership must be presented when registering the vehicle, and the student's registration receipt must be presented to receive the parking permit. Parking permit fees range from \$10 to \$50, based on the level of parking desired.

CREDIT BY EXAMINATION OR PLACEMENT EXAMINATION: The fee for taking an examination for credit is \$45.00 minimum and an additional \$15.00 for each credit hour in excess of three (3) for which credit is awarded. The fee is non-refundable and must be paid prior to the examination. A fee of \$15.00 per credit hour will be charged when an application for credit is made under the Credit by Placement Examination policy.

GRADUATION FEE: Each candidate for a degree from Memphis State University pays a \$25.00 fee to cover cost of the diploma, rental of cap and gown, and incidentals connected with the commencement exercises. This fee must be paid thirty days before graduation.

EXPERIENTIAL LEARNING CREDIT FEES: Students who apply for credit for experiential learning will pay a non-refundable portfolio assessment fee of \$45.00. After the portfolio has been evaluated and credit assigned, the student will pay \$15.00 per credit hour granted for each hour in excess of three for which credit is awarded. For students enrolled under a *group contract*, a maximum fee of \$90.00 will be assessed for credits assigned under the terms of the contract.

Currently the University College and the College of Communication and Fine Arts award credit for experiential learning. See "University College Fees" and "Commercial Music Fees" for related fee information.

IDENTIFICATION CARDS: The university issues to each student an identification card which bears the student's photograph and social security number. The card remains the property of the university and will be surrendered upon the request of a university official.

Inquiries about student identification cards should be made in the I.D. Office, room 176, Administration Building. The card is required for the borrowing of library books, admission to or approval to pick up or purchase student tickets to athletic and social events, the sale of used textbooks, and other official purposes. The card is also required to gain admission to the Registration Center each registration period.

Part-time students who are enrolled for at least six semester hours of credit courses will be given full-time I.D. card privileges.

The I.D. card is renewed during registration for each semester the student is enrolled. The summer sessions are considered as a semester.

If an I.D. card is lost or stolen, the student has twenty-four hours to file the proper report with the I.D. Office and/or the Security Office. In all cases, a student will be required to have a replacement card made. The replacement fee is \$10.00 for a card that has been damaged, stolen, or lost. A student will be charged a \$2.00 fee to make any change in data on the card.

Fraudulent use of the I.D. card will result in disciplinary action. The card is issued to the individual student and must not be loaned to another person for any reason. Each student should have no more than one (1) student identification card at a time.

LABORATORY DEPOSITS: Certain courses in chemistry require breakage deposits from \$10.00 to \$20.00 per semester, depending upon the course. Any unused portion of these deposits will be refunded.

LATE REGISTRATION: Students who do not complete registration (including the payment of fees) by the conclusion of Regular Registration will be charged \$10.00 for any late registration.

MEALS: The university cafeterias, student centers and vending areas, open to all students, provide wholesome food at reasonable prices. Cost of meals per student is estimated to be 1,600 per academic year.

COMMERCIAL MUSIC: Students who wish to apply for credit for experiential learning in Commercial Music may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. A non-refundable \$25.00 contract advising fee will be charged for the assessment of the portfolio. See "Experiential Learning Credit Fees" for related fee information.

COURSES IN APPLIED MUSIC: The fee for applied music shall be \$30.00 per semester for each one-half hour lesson.

MUSIC LOCKER DEPOSIT: Music students are required to have a locker for storage of university-owned musical instruments or equipment. Personal instruments may also be stored in lockers. A deposit of \$3.00 for one semester or \$4.00 for two semesters is required on each locker issued. This deposit, less a service charge of \$1.50 per semester, will be refunded upon return of the lock. Students will be expected to pay for any damages.

PHYSICAL EDUCATION LOCKER AND TOWEL FEE: Students enrolled in physical education courses must pay a fee of \$4.00 for the locker and towel issued them. Students must provide their own lock.

RETURNED CHECKS/CHARGE CARD DRAFTS: It is expected that a check or draft given to the university, for any reason, will be honored by the bank on which it is drawn. A check or draft dishonored by the bank on which it is drawn may be presented a second time at the discretion of the university. A \$15.00 returned check/draft charge will be assessed for all checks/drafts used in payment of registration fees, which are not promptly redeemed, will result in the deletion of the student from the class rolls.

NO-MORE-CHECKS STATUS: The privilege of making payments for fees and charges by personal check and check cashing privileges will be revoked for any student who has had more than one returned check/draft within a twelve month period for a period of one (1) year from the date the last check/draft is redeemed. A student will not be permitted to pay registration fees by check if any previous check in payment of registration fees has been returned.

TRANSCRIPTS: There is no fee for transcripts. However, the student will be charged \$1.00 for each official transcript over the maximum of five (5) per request. Transcripts are issued only at the request of the student in person or by letter. No transcript will be provided for a student who has any unfulfilled obligations to the university.

UNIVERSITY COLLEGE FEES: In addition to their \$5.00 application fee, students who apply to the University College must pay a screening fee of \$15.00, which is non-refundable. If accepted into the University College, the student must pay a non-refundable contract-advising fee of \$25.00.

VARIOUS COURSE FEES: Certain course offerings will require fees to obtain the necessary course-related supplies. Any student already possessing such items as required for completion of the course will be exempt from these fees. (Examples of such may be found in Art, Engineering Technology, Biology, etc.)

SUMMARY OF EXPENSES

	Per Hour (Summer and Part-Time)	Fall and Spring Semester Per Semester (Full Time)
Undergraduate:		
In-State Maintenance	\$63.00	\$737.00
Out-of-State Tuition	140.00	1,602.00
Out-of-State Total	\$203.00	\$2,339.00
Activity Fee	\$3.00	\$45.00
Student Housing: (see listing earlier in this section)		
Applied Music Courses: (see information earlier in this section)		
Incidental Charges:		
Adding or dropping courses, per form after Regular Registration	5.00	
Application for admission, first application	5.00	
Automobile Registration, per automobile (General Parking)	10.00	
Diploma, payable once	25.00	
Late Registration after regular registration period	10.00	
Transcripts, per copy after first five copies per request	1.00	
School and College Ability Test	5.00	
Residual American College Test	14.00	
Orientation Services (New Student Orientation)	34.00	
P.E. locker and towel, per semester	4.00	
Deposits:		
Dormitory Rooms refundable less charges, upon termination of occupancy	100.00	
Laboratory breakage (refundable less charges)	Variable	
Music locker deposit, per semester	3.00	
Additional Charges		
The university reserves the right to increase the charges listed herein or to add new ones whenever such increases or additions are found to be necessary.		

APPEAL PROCEDURES

APPEAL PROCEDURES FOR FEES AND REFUNDS: A student may appeal the assessment, application, calculation or interpretation of any university fee, charge, deposit, or refund, or any university action connected with fees and charges. Questions should generally be discussed with personnel in the Bursar's Office. If a student is not satisfied with the resolution made by the Bursar's Office, a written appeal, on forms available in the Bursar's Office, can be made to the Associate Vice President for Finance; this determination may be appealed to the Vice President for Business and Finance; and this determination may be appealed to the President of the university. All appeals must be made in writing within ten (10) days of the previous decision. Traffic fines are subject to a separate appeal procedure.

STUDENT AID

The university Student Financial Aid Office provides financial assistance for students in the form of scholarships, grants, loans and student employment. This office counsels with students about college expenses and financial aid opportunities.

All applicants for financial assistance must submit the University Financial Aid application, American College Testing Program Family Financial Statement or other approved need analysis report plus any other supporting documents requested by the Student Aid Office. All undergraduate students applying for financial aid must apply for the PELL Grant Program. All required forms may be obtained through the Student Aid Office upon request. The ACT Family Financial Statement is also available in most high school guidance offices. The ACT code number for Memphis State University is 3992.

The preferred application deadline for fall applications is April 1. For the spring semester the preferred application date is November 15. Applications are acknowledged as they are received, and award notices are mailed approximately July 1 for the fall semester. All awards are made on an academic award year basis. All students must submit a new application each year.

SCHOLARSHIPS

The university awards several hundred academic scholarships each year in varying amounts up to \$3,000. Most scholarships awarded are awarded to cover the amount of registration fees. In some cases, awards are available on a part-time basis. Scholastic achievement, leadership qualities, and need are factors utilized in evaluating applicants.

Scholarships are awarded for the academic year and are not available for summer school. Freshmen applying for scholarships must rank in the top twenty-five percent of their high school graduating classes. Currently enrolled students must have at least a 2.5 overall grade point average, and must be enrolled full-time. Each student wishing scholarship consideration must submit an application each academic year. The General University Scholarship deadline date is March 1; however, some scholarships have an earlier date. Information may be obtained from the Scholarship Office, Room 206, Scates Hall.

DISTINGUISHED SCHOLARSHIP PROGRAMS

Distinguished scholarships are awarded annually to entering freshmen of the highest academic attainment without regard to financial need. The deadline to apply for distinguished scholarships is January 1.

Memphis State University offers the following distinguished scholarships:

The Cecil C. Humphreys Presidential Scholars Program

The Presidential Scholars Program offers a four-year renewable scholarship on a competitive basis on those students who score 30 or better on the Enhanced ACT (or comparable SAT score) with a minimum 3.25 high school grade point average. The award provides annual registration fees, dorm allowance, and book

stipend for a minimum annual value of \$3,000 and a four year value of \$12,000. Selection criteria includes interviewing students with evidence of sound character, good work habits, and quality extracurricular activities. Recipients must maintain a 3.00 QPA the first year and a 3.25 QPA thereafter with a 10 hour per year service requirement.

Academic Excellence Scholarship

The Academic Excellence Scholarship is a four year renewable scholarship awarded on a competitive basis to academically talented students with outstanding leadership and achievement records. Applicants must score at least 30 on the Enhanced ACT (or the corresponding SAT score) and have a 3.5 high school QPA. All Academic Excellence Scholarship recipients must satisfy the academic program service requirement of 20 hours each year. Continued eligibility will also be based on completing 30 semester hours each academic year and maintaining a 3.0 QPA at the end of the freshman year and a 3.25 cumulative QPA each year thereafter.

The Cardio Vascular Center Pre-Medical Scholarship

The Cardio Vascular Center, Inc. and Memphis State University have established a scholarship program to assist superior students who are interested in pursuing a career in medicine, and to encourage their personal and scholarly development. Competitive awards will be available for undergraduate students in the pre-medical program.

In order to be considered for the Cardio Vascular Center Pre-Medical Scholarship, students must complete the scholarship application by January 1 and fulfill the following additional requirements:

1. full-time undergraduate enrollment in premedicine.
2. A minimum high school QPA of 3.25 and a score of 26 or better on the ACT.
3. Renewal and maintenance: a recipient is subject to review each year and must maintain a 3.50 QPA with a minimum of 30 semester hours of full-time study during the academic year.

Scholarships of \$2,000 will be awarded annually. The scholarships are renewable for four years of undergraduate study.

The Early Scholars Scholarship Program

The Early Scholars Scholarship Program is a non-competitive guaranteed scholarship open only to beginning freshmen who will enroll for the 1990 Fall term. The student must apply and be accepted for admissions by February 1, 1990. Students who have an Enhanced ACT score of 27 or above and a high school GPA of 3.50 will automatically qualify for the yearly cost of in-state registration fees and a \$300 book stipend. Continued eligibility will be based on maintaining a 3.0 cumulative GPA each year and completing a 30 hour service requirement each academic year. The scholarship is renewable for four years of undergraduate study.

Non-Resident Academic Scholarship Program

This competitive scholarship is awarded to in-coming freshmen with a non-resident admission status who have a minimum Enhanced ACT score of 31 (ACT of 27 for Minority) and a high school GPA of at least 3.25. All recipients of the program will be awarded the yearly cost of registration fees, out-of-state tuition, and a \$300 book stipend. Continued eligibility will be based on maintaining a cumulative 3.00 GPA each year and completing a 30 hour service requirement each academic year.

Transfer Scholarships

Community College Transfer- Registration Fees and \$300 Book Stipend. Renewable with 2.8 GPA and 30 hour per year service requirement. In State only. Associates Degree required with a minimum GPA of 3.50.

Community College Minority Transfer- Registration Fees and \$300 Book Stipend. Renewable with 2.8 GPA and 30 hour per year service requirement. In State and Out of State. Associates Degree required with a Minimum GPA of 2.8.

Community College- Registration Fees. Renewable with maintenance of 2.80 GPA. Recommendation by President of each of Tennessee's Community Colleges.

Adult Scholarships- Registration Fees. Renewable with maintenance of 2.8 GPA and 30 hour work service per semester for full-time students and 15 for part-time. In State only. Specifically for students 24 years of age and older. Candidates are selected on academic achievement, community involvement, professional goals, and financial need. Contact the office of Adult and Commuter Services, University Center, RM 443, Memphis State University, Memphis, TN 38152. (901) 678-2644

Leadership Award- Registration Fees. Renewable with 2.5 GPA. In State only. Primary focus will be on high school leadership. Community activities will be considered. Minimum ACT composite score of 20 or SAT combined score of 840 and a 2.5 high school GPA. Nomination from high school guidance counselor or principal. Contact the office of Judicial Affairs, Memphis State University, Memphis, TN 38152. (901) 678-2298.

GENERAL SCHOLARSHIPS

THE STATE BOARD OF REGENTS SCHOLARSHIP is for Tennessee residents with a 2.80 Q.P.A. or higher. Freshmen applying for the scholarship must rank in the upper quartile of their graduating class. The scholarship covers mandatory fees, and there is a service or work requirement for recipients.

ALUMNI VALEDICTORIAN SCHOLARSHIP The Memphis State University Alumni Association provides a Valedictorian Scholarship for the top scholar from each of Tennessee's accredited or state approved high schools. The qualifications for this program are that the recipients must rank number one in their class and meet the admission requirements of the University. The award, in an amount equal to in-state registration fees, is renewable and is based solely on academic standing.

THE MINORITY ENROLLMENT SCHOLARSHIP PROGRAM provides scholarship assistance to minority students who have outstanding records of academic and leadership abilities and who show maximum potential for graduation. Students will be selected on the basis of ACT scores, grade point averages, and achievements. Recipients chosen on the basis of outstanding merit and need will receive the yearly in-state registration fees and a book allowance of \$300. All recipients must fulfill the 30 hour per semester work requirement. Continued eligibility will also be based on completing 24 semester hours each academic year and maintaining a 2.8 QPA each year.

HIGH SCHOOL LEADERSHIP SCHOLARSHIPS will be given annually to 15 high school students in the Tennessee area. The scholarship covers in-state registration fees. Each high school principal/counselor in Tennessee may nominate one candidate from the high school. These students must have a minimum Q.P.A. of 2.5. The nominee's participation in a leadership role in community activities will be considered; however, primary focus will be on high school leadership (student council, class officers, club and organization office, athletics, etc.). Inquiries should be made of the Dean of Judicial Affairs, Memphis State University, Memphis, Tennessee, 38152.

THE GENERAL UNIVERSITY SCHOLARSHIP FUND provides scholarships varying in amount and duration to outstanding high school students.

THE TAYLOR AND MARY RICHARDSON SCHOLARSHIP is awarded to a graduate of Lake County High School in Tiptonville, Tennessee. Applicants must apply and be accepted as freshmen, demonstrate academic ability, and financial need.

THE JOHN W. AND MYRTLE P. RICHARDSON SCHOLARSHIP is awarded to students in the upper quartile of their high school class who show a need for financial assistance. The scholarship may be awarded to a student already enrolled at MSU. The recipient must maintain a 3.0 Q.P.A. The award covers in-state registration fees.

THE R. C. ANDERSON SCHOLARSHIP is restricted to male students between the ages of 18 and 24 from Benton, Decatur, and Henderson counties in Tennessee. The award covers registration fees for the freshman and sophomore years. Selection will be made on the basis of the quality of high school performance with particular attention given to ACT scores.

THE JOSEPHINE CIRCLE SCHOLARSHIP is awarded to an entering female freshman.

THE MSU UNIVERSITY WIVES SCHOLARSHIP is awarded to a sophomore or junior level female student based on academic achievement. The recipient cannot be awarded any other scholarship in the same year.

THE JAMES E. McGEHEE MORTGAGE COMPANY SCHOLARSHIP is awarded to an outstanding high school graduate who has demonstrated academic achievement. Financial need may be considered. The recipient must be a Shelby County resident.

THE MEMPHIS STATE UNIVERSITY FACULTY-STAFF SCHOLARSHIPS are awarded annually to several students on the basis of scholastic ability. Preference is given to children of faculty and staff. Recipients must be Tennessee residents.

THE HATTIE G. WATKINS SCHOLARSHIP provides scholarships to students on the basis of scholastic standing and financial need. Freshman recipients must have a minimum ACT score of 15. All recipients must enroll in at least 12 credit hours each semester, and maintain a cumulative QPA of at least 2.5.

THE HORACE H. WILLIS MEMORIAL SCHOLARSHIP is awarded to an incoming freshman on the basis of need for financial assistance and evidence of academic promise. The recipient must be a graduate of a Memphis City School and must have been in the upper 25% of his class.

THE LESLIE GRUBER SCHOLARSHIP is awarded annually to an incoming Tennessee high school graduate who has shown academic ability of at least a 3.0 Q.P.A. on a 4.0 scale, and financial need.

THE MEMPHIS HIGH SCHOOL ALUMNI SCHOLARSHIP is for graduates of Memphis high schools only. The recipient must demonstrate academic ability. Financial need may be considered.

THE JERRY N. BOONE AWARD is awarded to a student currently enrolled at Memphis State University who is in good standing academically and demonstrates financial need. Recommendations from a dean or department head is required. Available to transfer students.

THE BILLY J. MURPHY SCHOLARSHIP was established in 1974 to honor former MSU Athletic Director, Billy J. Murphy, for his long service to the school. The award is made to a Memphis area student who has demonstrated financial need and shows scholastic ability.

THE ABE WALDAUER MEMORIAL SCHOLARSHIP provides one scholarship to a Shelby county resident who demonstrates exceptional academic achievement and financial need.

THE JAMES McCLENDON HIGHLAND 100 SCHOLARSHIP is awarded to a Memphis area high school graduate who has demonstrated financial need and academic potential.

THE HENRY M. AND LENA MEYER KAHN SCHOLARSHIP is awarded to students who score 21 or above on the ACT and have a high school QPA of 3.0 or above. Preference given to boys and girls of Jewish faith.

THE COMMUNITY COLLEGE PRESIDENTIAL SCHOLARSHIP is awarded to one student from each of Tennessee's ten community colleges in honor of the president of that college.

THE JOHN WILCOX SCHOLARSHIP is awarded to one freshman, sophomore, junior, and senior at Memphis State University. The recipients must maintain a 2.5 overall Q.P.A. at Memphis State University.

THE LAKE COUNTY SCHOLARSHIP is awarded to a Lake County High School graduate who has an intense interest in obtaining a college degree and demonstrates financial need.

THE MIKE DRIVER SCHOLARSHIP is awarded to a student who is in good academic standing at Memphis State University.

THE ARTHUR HAMILTON MEMORIAL SCHOLARSHIP is awarded to a student enrolled at Memphis State University who is a Dyer County or Dyersburg High School graduate, and who shows financial need and is academically talented.

THE HOLIDAY CORPORATION SCHOLARSHIP is awarded annually to incoming freshman based on academic achievement.

THE EDITH WRIGHT WALLACE SCHOLARSHIP is awarded based on academic ability. Financial need may be a consideration.

THE DOROTHY BORUP MEMORIAL SCHOLARSHIP is awarded to students based on academic merit. Incoming freshmen must have a minimum ACT score of 20. All recipients must maintain a minimum undergraduate cumulative of QPA 2.5. Preference may be given to married students, and financial need may be a consideration.

THE DR. MARTIN L. KING JR. SCHOLARSHIP is awarded to students based on academic merit and leadership in social justice and human rights activities in the community and at Memphis State. A minimum cumulative QPA of 2.75 is required.

THE BOYS CLUB OF MEMPHIS SCHOLARSHIP is awarded to students at Memphis State, and preference shall be given to members of the Boys' Club of Memphis.

THE OMEGA PSI PHI/RONALD E. McNAIR SCHOLARSHIP is awarded to students who have completed at least 32 credit hours of course work. A minimum cumulative QPA of 2.75 is required. Financial need must be demonstrated. Consideration will also be given to leadership qualities.

THE FIRST NATIONAL BANK OF COLLIERVILLE SCHOLARSHIP is awarded to incoming freshmen who have graduated from Collierville High School. The minimum required cumulative QPA is 3.00, and a minimum ACT score of 22 is required. The recipient must be enrolled at Memphis State full-time, and must maintain a cumulative QPA of at least 3.00

THE COMMUNITY BANK OF GERMANTOWN SCHOLARSHIP is awarded to full-time students based on academic merit.

THE EDWARD G. AND BERNICE HUMPHREYS SCHOLARSHIP is awarded to full-time students based on academic merit. A minimum cumulative QPA of 3.0 must be maintained.

THE HANDICAPPED WORKERS OF AMERICA SCHOLARSHIP is awarded to students with a qualifiable disability. A minimum cumulative QPA of 2.50 is required. Financial need is a consideration.

THE THELMA M. AND RICHARD L. LYNCH, SR. SCHOLARSHIP is awarded to students who are United States citizens and Shelby county residents. A minimum cumulative QPA of 2.50 is required.

THE RALPH LEVY EDUCATION AWARD provides a \$500 stipend for books and supplies. The recipient must be a United States citizen. A cumulative QPA of at least 3.0 and financial need are required. Preference may be given to students whose parents are employed by Catherine's Inc.

THE LORI LEIGH CARROLL MEMORIAL PIANO SCHOLARSHIP is awarded to students who have demonstrated exceptional talent on the piano. Recipients are not required to be music majors.

THE COLLEGE OF ARTS AND SCIENCES

THE BLANCHARD S. TUAL MEMORIAL SCHOLARSHIP is awarded to a student at MSU majoring in History with a Q.P.A. of 2.0 or better.

THE BELLE McWILLIAMS SCHOLARSHIP recipient must be enrolled in the College of Arts and Sciences demonstrate an above average interest in American History, have diverse extracurricular activities, and demonstrate outstanding academic achievement. The recipient must be a sophomore or above with at least a 3.0 Q.P.A.

THE CARROLL BOWMAN SCHOLARSHIP is awarded to a philosophy major with demonstrated financial need and academic potential.

THE OPPORTUNITY FOUNDATION PAUL SCHWARTZ SCHOLARSHIP is awarded to social work majors who are seniors with a 2.5 minimum Q.P.A.

THE BOTANY BOOK AND SCHOLARSHIP FUND is awarded to a student studying Botany or Biology at Memphis State University

THE JOHN J. BELENCHIA UNICO MEMORIAL SCHOLARSHIP is awarded to a junior or senior Criminal Justice major who is in good standing and shows financial need. A minimum cumulative QPA of 2.0 is required.

THE LOUNSBURY GEOLOGY SCHOLARSHIP is awarded to sophomores, juniors, and seniors who are enrolled full-time, and have a cumulative QPA of at least 3.0. The recipients must be majoring in geology, with preference to students interested in oil and gas exploration.

THE DR. PAUL H. SISCO, SR. MEMORIAL SCHOLARSHIP is awarded to full-time students majoring in geography. A minimum QPA of 2.50 is required.

THE MEMPHIS CHEMICAL CLUB SCHOLARSHIP is available to full-time and part-time students majoring in chemistry. Students must have a minimum QPA of 3.0 in chemistry courses and must have completed at least one-half of the required chemistry courses. Students must be classified as juniors and must be expected to graduate within one calendar year from the time the scholarship is received. The recipient cannot be the recipient of another full-tuition academic scholarship simultaneously.

THE MATHEMATICAL SCIENCES SCHOLARSHIP is an award given to an incoming Freshman who has declared a major in a mathematical science. All awards are four-year renewable. To be eligible a student must have an ACT score of 26 or better.

or a comparable SAT score, and a high school average of at least 3.25, with a good record in mathematics.

THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS

THE ALLEN ROBINSON MEMORIAL SCHOLARSHIP is awarded to a qualifying student ASPA chapter member majoring in management with a concentration in personnel administration/industrial relations at Memphis State University. The recipient must have at least a 2.8 Q.P.A. attained through a minimum of 55 semester hours college credit. Financial need may be a consideration.

THE INSURANCE WOMEN OF MEMPHIS/CLYDE BEAUMONT SCHOLARSHIP is awarded to an insurance major who has at least sophomore standing. Applications may be obtained through the Finance, Insurance, and Real Estate Department.

THE TILSON REAL ESTATE SCHOLARSHIP is awarded to students majoring in real estate. The recipient must be of at least junior standing, have a minimum QPA of 3.0, and go through an interviewing process.

NORRELL SERVICES/SALES AND MARKETING EXECUTIVE SCHOLARSHIP is awarded to a junior or senior majoring in or having an interest in sales and/or marketing. Academic merit is a primary consideration.

THE ROBERT HUNTING JR., WHITE STATION OPTIMIST CLUB SCHOLARSHIP is awarded to a junior or senior interested in the field of banking who has at least a 2.5 Q.P.A. and needs financial assistance to attend Memphis State University. The recipient must be a West Tennessee resident.

YOUNG MORTGAGE BANKERS SCHOLARSHIP is awarded to a student of at least sophomore standing and majoring in real estate or finance with a career objective of real estate lending. The recipient must be an active member of Rho Epsilon Real Estate Professional Fraternity, or have plans to become an active member.

THE THOMAS Y. OWEN SCHOLARSHIP is awarded to an accounting major, demonstrating both financial need and outstanding academic achievement. A minimum cumulative QPA of 3.00 must be maintained. U.S. residency is required.

THE ETHEL LEWIS SCHOLARSHIP is sponsored by the University Career Women of Memphis State University. The scholarship is available to a junior or senior student majoring in office administration or preparing for a career as a business teacher. The recipient must be a resident of Tennessee for at least the two previous semesters. He/she must have a cumulative QPA of 3.0 or above.

DR. R. W. JENNINGS SCHOLARSHIP, a memorial to a former MSU faculty member, provides financial assistance to students in office administration. The recipient must have a QPA of at least 3.0 and have an ACT score of at least 18. He/she must be a resident and graduate of a Memphis/Shelby County high school. Financial need may be a consideration.

GREATER MEMPHIS EMPLOYEE BENEFITS COUNCIL SCHOLARSHIP is sponsored by the Greater Memphis Employee Benefits Council formed in 1977 to advance employee benefits planning. The scholarship is awarded to students of at least junior classification, majoring with an area of concentration in the Department of Finance, Insurance and Real Estate, Law School, or other related areas with a career interest in the employee benefits field.

THE JOHN ELKINGTON SCHOLARSHIP in Land Use Development is awarded to a junior student with a minimum GPA of 3.25 majoring in Real Estate or an allied discipline. Preference given to a student with a career interest in the land use development field.

THE MEMPHIS MOTOR CARRIERS ASSOCIATION SCHOLARSHIP is awarded to a marketing major with a concentration in Transportation. Student must be in good standing academically and be a junior or senior in classification.

THE JOY CRADDOCK MEMORIAL SCHOLARSHIP is presented each year by the Women's Council of Realtors to a junior or higher level student with a QPA of 2.5 or above, and majoring in Real Estate or any allied discipline within the Fogelman College of Business and Economics.

THE MATHIS AND MENARD INSURANCE SCHOLARSHIP is awarded to a student majoring in insurance. A minimum cumulative QPA of 2.50 is required. Preference shall be given to students demonstrating financial need.

THE RISK AND INSURANCE MANAGEMENT SOCIETY SCHOLARSHIP is awarded to students classified as at least juniors. The recipient must have a minimum cumulative QPA of at least 2.60, and must be majoring in Risk Management or Insurance Management.

THE MEMPHIS BOARD OF REALTORS/MARK SOWARDS MEMORIAL SCHOLARSHIP is awarded to students who are juniors or seniors and are majoring in Real Estate or an allied discipline. A minimum cumulative QPA of 2.50 is required.

THE TRAFFIC CLUB OF MEMPHIS MEMORIAL SCHOLARSHIP FUND is awarded to a junior or senior marketing major who has a concentration in Transportation.

THE DELTA LIFE AND ANNUITY SCHOLARSHIP is awarded to a student of at least junior standing in the Fogelman College of Business and Economics with a major in insurance and finance who has career intentions of entering the life of insurance, financial planning or estate planning fields. Selection is made based on academic merit. Undergraduate applicants must have a minimum cumulative QPA of at least 3.0, and graduate

recipients must have a QPA of at least 3.25. A demonstration of analytical work must be submitted in addition to the application.

THE UNISYS SCHOLARSHIP is awarded to a Marketing or Sales/Marketing major who has an overall Q.P.A. of 2.5 and is a U.S. citizen or permanent resident of the U.S.

THE LAYNE SPROLES MEMORIAL SCHOLARSHIP is awarded to students majoring in an area within the Fogelman College of Business and Economics who have a 2.5 or above overall Q.P.A. Preference is given to students pursuing a career in some area of Office Administration, Management, or Accounting.

THE JACK J. WALLACE SR. MEMORIAL SCHOLARSHIP is awarded to a junior or senior sales and marketing major who has a career interest in sales and marketing and has an acceptable QPA.

JOHN MALMO ADVERTISING, INC. SCHOLARSHIP is awarded to business and journalism students who desire to pursue careers in advertising or public relations. Financial need is considered. The recipient must be a U.S. citizen.

MALONE & HYDE INSURANCE SCHOLARSHIP is awarded to juniors and seniors in the College of Business and Economics majoring in insurance. The recipient must have a QPA of at least 2.75, and must be a Memphis area resident. Financial need may be considered.

THE SHELBY GROUP, INC. SCHOLARSHIP is awarded to students in the fields of marketing and management. The recipient must maintain a QPA of at least 2.50. Financial need will not be a consideration.

THE MID-SOUTH COMPENSATION ASSOCIATION SCHOLARSHIP is awarded to juniors and seniors majoring in management, personnel administration or a related field. A minimum cumulative QPA of 3.0 is required. Preference shall be given to students concentrating on wage and salary administration.

THE ASSOCIATED TRANSPORTATION CLUB OF MEMPHIS SCHOLARSHIP is awarded to students who have completed at least one year of full-time study. A certified copy of transcripts must be submitted with the application. Selection is based on scholastic ability, financial need, and major area of study. Preference shall be given to transportation majors who are at least of sophomore standing.

THE S L KOPALD SCHOLARSHIP is awarded to students who are graduates of Memphis City or Shelby County High School. Incoming freshmen must have a minimum ACT score of 26. The recipient must be majoring in marketing, and maintains a minimum QPA of 3.00.

THE GOLDSMITH'S DEPARTMENT STORE SCHOLARSHIP is awarded to students enrolled in the College of Business. The recipient must maintain a minimum cumulative QPA of 3.0 and must enroll in 15 credit hours each semester. The recipient must remain enrolled at Memphis State University for eight consecutive semesters. Incoming freshman must have a minimum ACT score of 28. Preference may be given to applicants from Shelby County, West Tennessee, and other areas served by Goldsmith and/or Federated Department Store.

THE ELEANOR O'NEILL SCHOLARSHIP is awarded to students majoring in advertising, public relations or journalism. Academic merit is considered. The recipient must be a full-time student and maintain a cumulative QPA of at least a 2.80.

FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS ALUMNI SCHOLARSHIP awarded to a junior or senior with a 3.0 Q.P.A. majoring in Business.

THE COLLEGE OF COMMUNICATION AND FINE ARTS

THE VARIETY CLUB — ROBERT S. JOHNSON SCHOLARSHIP was endowed in 1974 to honor the late noted writer for the Memphis Press Scimitar. A scholarship is given to a junior or senior majoring in journalism and seeking a career in some phase of that profession. Both financial need and scholarship are factors utilized in the selection of the recipient. The recipient must be a graduate of a Memphis area high school.

ART DIRECTORS CLUB OF MEMPHIS SCHOLARSHIP is awarded annually to an outstanding freshman, sophomore or junior student concentrating in Graphic Design, based upon portfolio review. A cumulative QPA of 3.0 or better is required.

THE DANA D. JOHNSON ART SCHOLARSHIP is awarded annually to a major in Art History, Studio Art, or Art Education with a QPA of 3.0 or higher.

THE FRANCES FALLS AUSTIN SCHOLARSHIP FUND is awarded annually to an incoming freshman planning to pursue an undergraduate degree in art.

INTERIOR DESIGN ALUMNI SCHOLARSHIP is awarded annually by the Interior Design Alumni Association to an outstanding junior or senior Interior Design student.

THE MARY MARGARET ROSS ART ALUMNI SCHOLARSHIP is awarded to a junior or senior majoring in Art by the MSU Art Alumni Association.

THE PAT KERR FINE ARTS SCHOLARSHIP is awarded annually to an outstanding junior majoring in Art.

MEMPHIS GRIDIRON SHOW INC. SCHOLARSHIP is awarded to an undergraduate student at Memphis State University who has an interest in music or journalism.

ISAAC HAYES EVENING OF SOUL SCHOLARSHIPS are awarded to students majoring in theatre and communication arts on the basis of financial need and who have demonstrated

competence in communication and/or theatre arts, with special emphasis placed on Black Theatre.

THE ETHEL T. MAXWELL VOICE SCHOLARSHIP is given to a voice major in the applied music degree program, Bachelor of Music. Incoming freshman must be in the upper quartile of their high school class and have a demonstrated voice talent.

THE JOURNALISM ALUMNI SCHOLARSHIP is awarded to a junior or senior journalism major who has at least a 2.5 cumulative Q.P.A. and shows an interest in pursuing a career in the journalism field.

THE HERBERT HERMANN MEMORIAL PIANO SCHOLARSHIP is awarded to a pianist with at least a 20 ACT score or a 3.0 Q.P.A. Auditions for jury board exams will be considered. The scholarship selection is coordinated by the Music Department piano faculty and the Student Aid Office.

THE ELEANOR B. O'NEILL SCHOLARSHIP is awarded to a junior or senior student in journalism, public relations, or advertising who shows promise in the field and has a QPA of 2.8 or above.

THE BAND ALUMNI SCHOLARSHIP FUND is awarded by the Board of Directors of the Band Alumni Chapter from candidates recommended by the band faculty. The recipient should have at least a 2.5 Q.P.A. and should be majoring in music.

HAIR THEATRE AND COMMUNICATION ARTS SCHOLARSHIPS are awarded to students majoring in theatre and communication arts on the basis of need and promising talent.

THE MUSIC ALUMNI SCHOLARSHIP is funded for the purpose of providing scholarships for students in the Music Department.

THE SCRIPPS-HOWARD FOUNDATION, EDWARD J. MEE-MAN SCHOLARSHIP is awarded to a junior or senior student in journalism who intends to enter the field of newspaper journalism. Student must show academic ability and financial need.

THE MEMPHIS AREA BROADCASTERS SCHOLARSHIP is awarded to an outstanding undergraduate in the area of broadcasting. The student must plan to pursue a career in radio/TV/film. Academic merit will be considered and financial need may be a consideration as well.

THE ELBA GANDY MEMORIAL MUSIC SCHOLARSHIP is awarded to a student studying music at Memphis State University.

THE BILLY M. JONES SCHOLARSHIP is awarded to a student studying and/or working in an area that relates to community relations. This would qualify any undergraduate student studying in marketing, commercial art or any discipline within the College of Communication and Fine Arts to apply.

INTERIOR DESIGN ALUMNI SCHOLARSHIP is awarded annually by the Interior Design Alumni Association to an outstanding junior or senior Interior Design major with a 2.8 or better Q.P.A.

MEDIA GENERAL BROADCASTING SERVICES, INC. SCHOLARSHIP is awarded to a student enrolled in a Commercial Music program involving the business and technology of the industry.

THE LORI LEIGH CARROLL MEMORIAL PIANO SCHOLARSHIP is awarded to a student who has demonstrated exceptional talent on the piano. Recipients are not required to be music majors.

THE PRSA, MEMPHIS CHAPTER SCHOLARSHIP is awarded to students majoring in public relations. A minimum QPA of 3.0 is required. The recipient must be a United States citizen.

THE COLLEGE OF EDUCATION

SARAH P. EATON SCHOLARSHIP, provides scholarships for elementary education students from Crittenden and St. Frances counties in Arkansas.

THE KERMIT G. HANCOCK SCHOLARSHIP FOR DISTRIBUTIVE EDUCATION provides scholarships to students who plan to major in distributive education and become teachers of marketing and distributive education in high schools in the State of Tennessee.

THE MEMPHIS HOME FURNISHINGS ASSOCIATION SCHOLARSHIP is awarded to a home furnishings major in the Home Economics Department who has earned at least a 2.5 QPA. Preference will be given to junior or senior students with additional consideration for those whose families are employed in the home furnishings industry.

THE KIWANIS CLUB OF EAST MEMPHIS MEMORIAL SCHOLARSHIP is presented to a junior, senior, or graduate student majoring in special education and demonstrating high achievement and need. The recipient must be a Shelby County resident and must have a cumulative QPA of at least 2.50.

THE LETTIE PATE WHITEHEAD FOUNDATION SCHOLARSHIP is provided for full-time study in special education or nursing to Christian girls who are in need and deserving of such assistance.

THE HAROLD W. PERRY SCHOLARSHIP is awarded to a student majoring in special education and rehabilitation who, in training as a teacher to work with the multihandicapped, demonstrates high scholastic achievement, experience, and a willingness to work with the handicapped.

ALPHA DELTA KAPPA, ALPHA CHAPTER SCHOLARSHIP is awarded to a junior or senior who is a Shelby County resident, has demonstrated high academic achievement and need, and plans to pursue the profession of teaching. A minimum cumulative QPA of 2.30 is required. The recipient should not be awarded any other scholarship in the same semester.

THE ALPHA DELTA KAPPA LAMBDA CHAPTER SCHOLARSHIP is awarded to a junior or senior who is a resident of West Tennessee, has demonstrated high academic achievement, and plans to pursue the profession of teaching. The minimum cumulative QPA required is 2.50.

THE ALLEN SHACKELFORD EAST MEMPHIS EXCHANGE SCHOLARSHIP is awarded to a hearing impaired or deaf student who is enrolled full-time. If no qualified applicant is chosen, the award is to go to a student training to be a teacher of the deaf.

THE QUOTA CLUB OF MEMPHIS SCHOLARSHIP is awarded to a student in school training to be a teacher of the hearing impaired or deaf. The recipient must have financial need for the scholarship.

THE COLLEGE OF EDUCATION ALUMNI CHAPTER SCHOLARSHIP is awarded to an education major. The applicant must demonstrate need and maintain a 3.0 cumulative Q.P.A. The recipient must be a junior or senior.

THE PAT JUSTICE MEMORIAL SCHOLARSHIP is awarded to a student of at least senior standing who is pursuing a career in the teaching profession. It is based on academic merit and is awarded to Memphis State University by the Beta Iota Chapter of the Delta Kappa Gamma Society.

THE PAT KERR INCORPORATED SCHOLARSHIP is awarded annually to a junior or senior student in good academic standing, majoring in either Home Economics, Art, or a discipline connected with the area of Fashion Design.

THE ERNEST C. BALL SCHOLARSHIP is awarded to a student majoring in Education who shows academic ability and financial need.

THE FRANCES INA STEWART DAVIES SCHOLARSHIP assists female students pursuing degrees in home economics who maintain a QPA of at least 3.0. Financial need may be considered.

THE ELLEN DAVIES-RODGERS SCHOLARSHIP assists students pursuing degrees in early childhood education with emphasis on nursery school, kindergarten, and grades 1, 2 and 3. The recipient must maintain at least a 3.0 QPA.

THE BARBARA TUCKMAN MEMORIAL SCHOLARSHIP is awarded to students enrolled in economics classes. The recipient must maintain an undergraduate minimum cumulative QPA of 3.00 and a graduate minimum cumulative QPA of at least 3.20 and should be interested in economics education.

ELMA ROANE SCHOLARSHIP is awarded to a full time undergraduate student with a QPA of 2.75 and/or a graduate student with a minimum QPA of 3.25 with a declared major in the HPER Department with a desire to work with young people through teaching, coaching, sports leadership, or athletic training.

THE HERFF COLLEGE OF ENGINEERING

THE HERFF ENGINEERING SCHOLARSHIPS provided annually through the Herbert Herff Estate are available to beginning and currently enrolled students who have demonstrated aptitude for engineering. Applications for these scholarships are submitted through the Herff College of Engineering. Recipients must have a competitive ACT score.

THE MEMPHIS SOCIETY OF PROFESSIONAL ENGINEERS SCHOLARSHIP is awarded to an upcoming junior engineering student.

THE RAYMOND JOHN AND MYRLIE FENNER COLTHARP MEMORIAL SCHOLARSHIP is awarded to an undergraduate engineering technology student who has at least a 2.0 Q.P.A. and financial need. The recipient must be a citizen of the U.S.

THE DEMPSIE B. MORRISON, JR., MEMORIAL SCHOLARSHIP is awarded to an undergraduate engineering technology student who has at least a 3.0 Q.P.A. and demonstrates financial need. Preference shall be given to students interested in construction specifications. The recipient must be a West Tennessee resident.

THE RICHARD E. WHITMORE SCHOLARSHIP is awarded to a Tennessee resident who is a sophomore, junior, or senior engineering student demonstrating both financial need and academic achievement; preferably majoring in construction and an active member of the student chapter of AGC.

THE WHIRLPOOL MANUFACTURING TECHNOLOGY SCHOLARSHIP provides scholarships to junior and senior students majoring in engineering technology with an interest in metal products manufacturing. The recipient must be a U.S. citizen with financial need.

TENNESSEE ROAD BUILDERS ASSOCIATION provides scholarships for students interested in following a transportation career and construction related to road building. Selection is made by the Tennessee Road Builders Association. The recipient must have a minimum cumulative QPA of 2.0 and be enrolled in a Civil Engineering curriculum.

THE MASONRY INSTITUTE OF TENNESSEE SCHOLARSHIP is awarded to a junior or senior student with a career interest in the field of masonry, majoring in architectural technology, construction technology, or structural engineering, who has earned at least a 2.0 cumulative Q.P.A.

NATALIA JACOBSON MEMORIAL SCHOLARSHIP provides scholarships to technology students who show financial need. The recipients are selected by the Division of Engineering Technology with approval of such by the Ladies Auxiliary. Students should have a minimum cumulative QPA of 2.50, and should be interested in the home building industry.

APAC TN SCHOLARSHIP FUND provides a scholarship to a senior majoring in construction technology with priority being

given to students taking courses in bituminous products. Selection is based on need as well as academic ability. Application may be obtained through the Division of Engineering Technology with final selection being made by Ashland-Warren Company. The recipient must be a U.S. citizen.

HOYT B. WOOTEN SCHOLARSHIP is awarded to students in electrical engineering who are pursuing careers in engineering education. The recipient must be a junior or senior and demonstrate academic ability and financial need.

THE MR. & MRS. W. MCNEILL AYRES CONSTRUCTION TECHNOLOGY GRANT is awarded to juniors or seniors majoring in construction technology. A minimum cumulative QPA of 2.50 is required. Preference shall be given to students who must work to meet college expenses.

THE PICKERING MEMORIAL SCHOLARSHIP is awarded to students majoring in civil engineering. A minimum cumulative QPA of 3.0 is required.

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA SCHOLARSHIPS are awarded to students studying the field of construction within the Civil Engineering or Technology departments. Selections are made based on academic merit.

THE LEON D. CASH SCHOLARSHIP is awarded to juniors and seniors majoring in electrical engineering. A minimum cumulative QPA of 2.50 is required.

SCHOOL OF NURSING

THE SHARON L. HANSARD MEMORIAL SCHOLARSHIP is awarded to a student enrolled in MSU's School of Nursing. The applicant must be of high moral character, dedicated to service of others, possess academic ability, and have a need for financial assistance to attend MSU.

THE NURSING ALUMNI SCHOLARSHIP is designed to assist deserving students in pursuing a nursing career. The applicant must maintain a 3.0 Q.P.A. or better.

LETIE PATE WHITEHEAD FOUNDATION SCHOLARSHIP is provided for full time study in special education or nursing to Christian girls who are in need and are deserving of such assistance.

THE DEBRA ANN BOONE SCHOLARSHIP is awarded to female nursing students based on academic ability and financial need. A recommendation from a full-time faculty member in the School of Nursing is required.

THE ALLENE FARRIS MEMORIAL SCHOLARSHIP is awarded to Dyer County Nursing students based on academic merit.

UNIVERSITY COLLEGE

ALUMNI SCHOLARSHIPS are supported by the University College Alumni Chapter. These scholarships are based upon financial and related needs. Up to three scholarships are awarded each year.

THE E.A. HAMILTON SCHOLARSHIP provides financial assistance to students who are firefighters, or dependents of firefighters.

EAST MEMPHIS BUSINESS AND PROFESSIONAL WOMEN'S SCHOLARSHIP assists students in the University College pursuing BPS degrees. The recipient must maintain a 2.50 QPA or better. Financial need may be considered.

MARTHA ARMSTRONG SCHOLARSHIP provides assistance for students enrolled in the Mini College who maintain a QPA of at least 3.0.

THE PATSY MOORE MEMORIAL SCHOLARSHIP assists a student enrolled in the Mini College who is in good standing and who is pursuing an academic degree program.

RALEIGH BUSINESS AND PROFESSIONAL WOMEN'S SCHOLARSHIP assists female students who have satisfactorily completed six credit hours in the Mini College and have shown academic achievement. Preference is given to single parents.

SPECIAL SCHOLARSHIPS

ARMED FORCES COMMUNICATIONS AND ELECTRONICS (AFCEA) awards a scholarship to a sophomore Army, Navy, or Air Force cadet for undergraduate study in a course relating to AFCEA's sphere of interest (electrical; electronics or communications engineering; or technical photography). The winning cadet receives two checks: one for use in the junior year, and one for use in the senior year. Inquiries should be directed to the Department of Aerospace Studies.

AFROTC COLLEGE SCHOLARSHIPS cover full tuition, laboratory fees, reimbursement for textbooks, and \$100 per month in non-taxable subsistence for those enrolled in the Aerospace Studies program. Such scholarships may be awarded for 4, 3-1/2, 3, 2-1/2 or 2 years and must be applied during the school year preceding their activation.

ARMY ROTC SCHOLARSHIPS: For the student who desires to serve in the U.S. Army as an officer, the U.S. Army offers 4, 3, and 2 year scholarships. These scholarships pay for tuition, provide an allowance for books and incidental fees, plus pay up to \$1,000 a year for subsistence.

NAVY ROTC SCHOLARSHIPS: Navy RQTC offers scholarships which pay for tuition, textbooks, fees of an instructional nature and a subsistence allowance. Four-year NRQTC scholarships are awarded annually based on a competitive selection process in which consideration is given to such factors as high school record, college board scores, extracurricular activities, and leadership qualities. Highly qualified Navy-option alternate selectees who are not offered four-year scholarships due to

limited vacancies, will receive guarantees of three-year scholarships commencing with their sophomore year contingent upon satisfying the following requirements as freshmen: (a) NRQTC College Program enrollment; (b) quality point average of 2.5 or better on a 4.0 scale; (c) positive recommendation from the NRQTC unit commanding officer and (d) maintenance of the physical qualifications required of ROTC scholarship students. The Navy also has a two-year scholarship program available to students beginning their junior year in college.

THE JAKE FONDREN SCHOLARSHIP recipient must be a U.S. citizen, in good academic standing, demonstrate financial need, be an undergraduate student, and exhibit a definite interest in golf.

THE MEMPHIS ADVERTISING FEDERATION ASSISTANT-SHIP in Journalism is designed to encourage young people with outstanding scholastic and journalistic ability.

THE CURTIS PERSON GOLF SCHOLARSHIP is awarded to a U.S. citizen in good academic standing, demonstrating financial need, being either a male or female, undergraduate student and exhibiting an outstanding talent for golf.

THE COCKROFT LAUGHLIN BASEBALL SCHOLARSHIP is awarded to a student athlete who is nominated by a chartered Tennessee Fellowship of Christian Athletes Chapter, is a Tennessee resident, and be a member or prospective member of Memphis State University's baseball team.

THE MSU RACQUETBALL SCHOLARSHIP is given to students participating on the MSU Racquetball team. Recipients are selected on the basis of athletic ability and leadership.

THE MSU HANDBALL SCHOLARSHIP is given to students participating on the MSU Handball team. Recipients are selected on the basis of athletic ability and leadership.

SPONSORS/PARTICIPANTS' GERONTOLOGY SCHOLARSHIP FOR SUMMER STUDY assists students in the field of gerontology. Undergraduate recipients must maintain a QPA of at least 2.50.

BAILEY PRICHARD MEMORIAL RACQUETBALL SCHOLARSHIP assists student athletes on the Memphis State University Racquetball Team. The recipient must maintain a 2.5 minimum QPA.

SPEECH AND HEARING SCHOLARSHIP assists students studying Audiology and Speech Pathology.

MARION G. EVANS SCHOLARSHIP assists students studying to become teachers of the deaf.

HELEN HAMILTON PERSON MEMORIAL GOLF SCHOLARSHIP provides assistance for female undergraduate students who are talented golfers and who maintain a minimum QPA of 2.50.

C. HILLMAN ROBBINS MEMORIAL SCHOLARSHIP assists students who are members of the Memphis State University Golf Team.

THE AVRON FOGLMAN BASEBALL SCHOLARSHIP is awarded to members of the Memphis State baseball team.

OTIS JACKSON LEADERSHIP SCHOLARSHIP is awarded to a Memphis State student or high school senior with an overall QPA of 2.0 and a participant on a MSU Athletic team.

GRANTS

PELL GRANT

The Pell Grant is a non-repayable, federally funded, grant program for undergraduate students. The amount is determined by the financial eligibility of the student (family) and the cost of college attendance. Students must be admitted as regular undergraduates and be enrolled for at least 6 credit hours to be eligible. Applicants who submit the ACT Family Financial Statement or Pell Grant Application may expect to receive a Student Aid Report (SAR) within four to six weeks. All three copies of the report should be sent to the Student Aid Office as soon as possible for processing at Memphis State University.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

The Supplemental Educational Opportunity Grant program is a federally subsidized program whereby direct gift awards may be made to undergraduate students with exceptional financial need (priority given to Pell Grant recipients). Normally, Supplemental Grants are awarded as part of the student's financial aid package. The

amount awarded per academic year will range from \$200 to \$2200 depending on the student's established need.

THE TENNESSEE STUDENT ASSISTANCE AWARD PROGRAM

Students who are residents of the State of Tennessee may apply for a Tennessee Student Assistance Award. In order to apply, a student must submit a ACT Family Financial Statement or other federally approved financial statement to the following address:

Tennessee Student Assistance Corporation
404 James Robertson Parkway,
Suite 1950, Parkway Towers
Nashville, Tennessee 37219

The ACT code number for the Tennessee Student Assistance Corporation is 4015. Applications for this grant may be obtained through the Student Aid Office or by writing the above address. Determination as to grant recipients is made by the state agency in Nashville.

LOANS

PERKINS LOAN PROGRAM

The National Defense Education Act of 1958 provided funds to institutions of higher education for the purpose of making low-interest, long term educational loans available to students who demonstrate academic promise and who have a need for financial assistance. These loans bear no interest until six or nine months (depending on when the borrower's first loan debt was incurred) after a student graduates or interrupts his/her course of study. The interest rate is currently five percent per year on the unpaid balance with a maximum repayment period of ten years. For a listing of repayment deferrals and cancellations, contact the Student Aid Office.

STAFFORD STUDENT LOAN PROGRAM (formerly GSL)

The Stafford Student Loan is a low interest (currently 8%) loan made available to the student through a lender, such as a bank or credit union. The loan is insured by a guarantee agency and also by the federal government. Depending on financial need, a student may borrow up to \$2625 a year if he/she is a first or second year undergraduate student; \$4000 a year, if he/she is a third, fourth or fifth year undergraduate student; \$7500 a year, if he/she is a graduate or law student. The total debt a undergraduate student can incur under this program is \$17,250. A graduate or law student can incur a total debt of \$54,750, including loans made at the undergraduate level. Payment is deferred until six months after the student ceases to carry at least a half-time load. Numerous lender applications are available at the Student Aid Office. All applicants must

submit the ACT, CSS or other federally approved need analysis statement.

SLS/PLUS LOAN PROGRAMS

SLS/PLUS loans are meant to provide additional funds for educational expenses. Like Stafford Student Loans, they are made by a lender such as a bank, credit union or savings and loan association. SLS loans are for independent students and PLUS loans are for parent borrowers. Unlike PLUS applicants, SLS applicants must *first* apply for the Pell Grant and/or Stafford Student Loan programs. Independent students and the parents of dependent undergraduate students may borrow up to \$4000 per academic year. Interest payments, if not deferred, begin within 60 days after the disbursement of the loan. Contact the Student Aid Office for more information on these programs.

FREEMAN LOAN PROGRAM

The Freeman Loan program was established for the sole purpose of providing worthy/needy students loans to help pay a part of their educational costs when other financial assistance is not available. Eligibility for this low interest, long term loan program is based upon satisfactory academic progress and financial need. Applicants for this program must submit the ACT Family Financial Statement and other documents evidencing financial need.

THE TEACHER LOAN SCHOLARSHIP PROGRAM

The Teacher Loan Scholarship program provides that students who have been admitted to or enrolled in any accredited university in Tennessee, and are committed to teaching in the Tennessee public schools may be eligible for up to \$1500 per academic year for up to four years. The program is designed to be awarded as a loan, but as trained teachers fulfill their commitment to teach in Tennessee, the loan will be forgiven or turned into a scholarship on a year-for-year basis. In other words, for each year of creditable full-time teaching in math or science under the Tennessee public school system, the recipients shall receive cancellation credit of 25% of the total amount borrowed plus interest accrued. Applications for information about the program may be obtained from the Tennessee Student Assistance Corporation, the M.S.U. College of Education or the Student Aid Office.

REGISTRATION/EMERGENCY LOAN PROGRAM

The Registration/Emergency Loan program was established for the purpose of providing one-time, low interest, short-term educational loans to assist students who have educationally related emergency situations. Eligibility is based upon a 2.0 Q.P.A., a semester of previous enrollment, and an absence of indebtedness to the university. The maximum loan amount is

the semester cost of in-state tuition and fees.

OTHER LOAN FUNDS

The university maintains a number of small loan funds for assisting students with emergency type situations. Some of these loans are listed below:

The General Everett R. Cook Arnold Air Society Loan Fund was established to provide financial assistance in the form of short-term loans for students enrolled in the Professional Officer Course of the Air Force Reserve Officers Training Corps.

The General University Loan Fund provides short-term, low interest loans up to \$200 for those students in emergency situations.

The General Ralph H. Wooten Loan Fund was established for the purpose of providing low interest educational loans to students enrolled in the Air Force Reserve Officers Training Corps.

STUDENT EMPLOYMENT

Memphis State University offers two types of on-campus student employment: College Work-Study (CWS) and Regular Student Employment (RSE). Students cannot be employed under both programs at the same time.

COLLEGE WORK STUDY

College Work Study (CWS) is a need based financial aid program. It is federally funded, university administered, and designed to help students (undergraduate and graduate) defray the cost of post-secondary education. The amount of the award is based on need and the availability of funds. The pay will be at least the current federal minimum wage, but it may also be related to the type of work to be performed and its difficulty. Students must be enrolled for and maintain at least 12 semester hours (Fall/Spring) and 6 semester hours (Summer) to qualify for College Work Study. To apply, students must file the ACT Family Financial Statement, Student Aid Office Application and other required documents each year.

REGULAR STUDENT EMPLOYMENT

The Regular Student Employment (RSE) program offers on-campus, part-time jobs to students who do not qualify for College Work-Study. This program is monitored by the university. Application for RSE may be filed at any time during the year; however, employment is contingent upon the availability of jobs. Note: Any student employed under the RSE program who is receiving any campus-based federal aid during the academic year (College Work-Study, Perkins Loan, Supplemental Educational Opportunity Grants, etc.) is restricted by federal guidelines. A limit is imposed on his/her earnings, and it is possible that he/she may not be eligible for any on-campus

employment. Regular Student Employees must be enrolled at Memphis State University for at least six semester hours. Students seeking on-campus employment should contact the University Student Employment Office.

The Tennessee Department of Employment Security maintains an office on campus for assisting students with off-campus employment. The service is free.

INTERNATIONAL STUDENTS

International Students on permanent visas are eligible to apply for College Work Study. Pursuant to regulations of the Immigration and Naturalization Service, there is a restriction on the number of hours students on certain visas may work. Those students who have questions regarding employment should contact the International Student Advisor.

Student Aid Refund Repayment Policy

The formula prescribing the amount of Title IV funds to be refunded to Title IV accounts has been established by federal regulations. The policy is: Title IV funds disbursed for the payment period (excluding CWSP)/Total aid disbursed including Title IV funds but excluding CWSP X MSU. Federal regulations stipulate that each institution shall develop written policies to determine which Title IV Program(s) will receive the refund or repayment.

REFUND:

1. When a refund is due a student and Title IV funds are involved and the financial aid awarded is equal to or in excess of the amount of the student's full tuition/maintenance fees, the Student Aid Office will determine according to the federal formula the portion of federal aid funds to be returned to the federal aid account. The refund amount will be placed in the respective aid account(s) in the same proportion as the aid awarded.

2. When a refund is due a student and Title IV funds are involved and the financial aid awarded is less than the amount of the tuition/maintenance fees paid by the student, the refund will be distributed first to the appropriate financial aid accounts according to the required federal formula. If the refund is greater than the original amount of the aid awarded, the difference amount will be returned to the student after the appropriate aid account(s) have been totally reimbursed.

3. Refunds applicable to non-Title IV funds will be distributed to the respective aid account in the same proportion as the aid awarded.

4. A 100% refund will be given in the event of death.

REPAYMENT:

1. When a student receives financial aid and one of the following situations occur: (a) the student is issued a contingency fee card which is not honored by the fund agency involved; (b) the student receives an overpayment due to non-eligibility or administrative error; (c) the student withdraws prior to the start of classes or fails to pay tuition/maintenance fees; the student must repay the total amount of aid received or overpaid.

2. If a student receives funds in excess of university charges for cost-of-living expenses from Pell Grant, Perkins Loan, Supplemental Educational Opportunity Grant (SEOG), and/or State Student Incentive Grant programs (Federal Title IV programs), and subsequently withdraws or drops out of school:

(a) the student's cost-of-living expense, as determined by the Student Aid Office, incurred up to the date of withdrawal will be compared to the amount he/

she received for that term for such expenses; (b) if the amount received exceeds the expense incurred, the excess amount will be considered an overpayment and must be repaid by the student.

3. The repayment amount will be placed in the respective aid account(s) in the same proportion as the aid awarded.

SATISFACTORY PROGRESS POLICY FOR FINANCIAL AID RECIPIENTS UNDER FEDERAL PROGRAMS

All students who receive financial aid must be working toward a degree and comply with all institutional, state, and federal policies and standards applying to financial aid programs. Current federal regulations require different progress standards for students who received federal aid for the first time after July 1, 1987 as compared to recipients of aid before that date. In order to assure that student aid recipients make progress toward a degree, both in terms of the number of hours completed and the cumulative QPA, Memphis State University will utilize the following satisfactory progress policy:

I. Progress Standards

A. Degree Completion Requirements: Students receiving Student Financial Aid must complete degree requirements within the following prescribed periods:

1. Full Time Undergraduates - Students receiving aid **prior to** July 1, 1987: six (6) years.
2. Full Time Undergraduates - Students receiving aid for the first time **after** July 1, 1987: five (5) years.
3. Graduate and Law - Six (6) years beyond the undergraduate level.
4. Students enrolled in less than full time study (12 hours per term undergraduate/9 hours per term graduate) or in a combination of full time/part time study, will have the time period extended in a ratio proportionate to the credit hours enrolled.

B. Recommended Progress Toward Degree Completion: In order to meet the degree completion requirements students should, as a minimum, accumulate credit hours for which they received Student Financial Aid payment as follows:

1. Undergraduate/Full Time - 27 credit hours per academic year.
2. Undergraduate/Three-Quarters Time - 21 credit hours per academic year.
3. Undergraduate/Half-Time - 15 credit hours per academic year.
4. Graduate and Law/Full Time - 18 credit hours per academic year.
5. Graduate and Law/Half-Time - 12 credit hours per academic year.

C. Cumulative QPA Progress: In addition to the above, students must meet the academic retention standards of Memphis State University and must have the following overall cumulative QPA:

1. Grant and Work Study Programs:

- a. At the end of the Spring Semester of the first year of attendance, an undergraduate student must have a minimum 1.65 cumulative QPA.
- b. At the end of the Spring Semester of the second year of attendance, an undergraduate student must have a minimum 2.00 cumulative QPA.
- c. Students who transfer credit hours from another institution will be evaluated on the number of hours transferred and years of aid received from other institutions for remaining years of aid eligibility.

d. Students who received federal aid for the first time after July 1, 1987 will be suspended from further financial aid if they do not have a minimum 2.00 cumulative QPA at the end of their second year of attendance.

2. Loan Programs (Perkins/Stafford/GSL/SLS/PLUS/Freeman):

- a. Undergraduate/Law Students - must have a 2.0 cumulative QPA at the end of each semester.
- b. Graduate Students - must have a 3.0 cumulative QPA at the end of each semester.
- c. Transfer students must meet the terms as specified in 2a. and b. above.

II. Financial Aid Probation

- A. Students will be placed on Financial Aid Probation for their next term of enrollment if they fail to meet any applicable standard outlined above.
- B. Students receiving financial aid who withdraw for the first time will be placed on Financial Aid Probation.
- C. Financial aid payment may be continued during probation dependent upon the program of assistance.

III. Removal from Financial Aid Probation

A student may be removed from Financial Aid Probation at the end of the probation term if he/she meets the requirements of Section I, SATISFACTORY PROGRESS STANDARDS.

IV. Financial Aid Suspension

- A. During a period of financial aid suspension, a student may **not receive** financial aid payments.
- B. Recipients of federal aid **prior to** July 1, 1987 will be placed on suspension if they fail to meet the requirements of satisfactory progress during the probationary term.
- C. Recipients of federal aid for the first time **after** July 1, 1987 - will be placed on suspension after their **second year of attendance** if their cumulative QPA is less than 2.00 (undergraduate/law) or 3.00 (graduate).
- D. Any student who withdraws from the university for the second time while receiving financial aid will be suspended.

V. Removal from Suspension

- A student placed on suspension will be removed from suspension when he/she meets the specific QPA and/or the yearly completion rate.
- B. Students removed from suspension revert to a probationary status.

VI. Permanent Removal from Financial Aid

Any student suspended for the second time will be removed from financial aid permanently.

VII. Appeals of Financial Aid Probation/ Suspension

Students placed on Financial Aid Probation or Suspension may appeal that decision to the Director of Student Aid within 45 days of the date of the notification. The appeal must be prepared in writing and be accompanied by appropriate supporting documents. Reasons that may be acceptable for an appeal are:

- A. Serious illness or accident to the student: This will require a medical statement from a physician.
- B. Death, serious illness, or injury in the immediate family (parent, children, spouse): A physician's statement or appropriate death certificate will be required.
- C. Administrative error by Memphis State University.
- D. Other extenuating circumstances may be considered.

If not satisfied with the decision of the Director of Student Aid, a student may appeal to the Director of Enrollment Management. Subsequent appeals may be made to the Vice President for Student Educational Services and the President of Memphis State University.

4. STUDENT ACTIVITIES, SERVICES, HONORS AND AWARDS

STUDENT DEVELOPMENT

The quality of Memphis State is reflected not only in the content of its academic programs but also in the array of activities and services provided for its students. At MSU, satisfying the individual needs of students has become an ever-increasing commitment, regardless of whether those needs are personal, academic, psychological or social.

The university strives to make student life fulfilling in an environment conducive to academic growth. The range of support services provided include counseling, skills training, tutoring, health care, and job placement, to name only a few.

THE CENTER FOR STUDENT DEVELOPMENT

The Center for Student Development is a comprehensive counseling and assistance facility providing personal/psychological, academic, and career resources for students to draw upon as they confront the developmental tasks concomitant with their educational experience. The Center for Student Development encompasses a variety of free counseling and helping activities through its various components. As part of its educational mission the Center offers an APA approved Pre-Doctorial Internship Training Program for graduate students in Clinical and Counseling Psychology.

Personal/Psychological Counseling

The personal/psychological counseling component provides students with the opportunity to discuss and explore any concerns and feelings that are of importance to them. Problems in interpersonal relationships, feelings of loneliness or inadequacy, family or marriage difficulties, depression, the inability to concentrate or study, or simply "feeling the need to talk things out" are all examples of concerns which are dealt with through personal counseling. The staff is professionally trained and experienced in working with a wide variety of student concerns through individual and group counseling, testing, programs and workshops, and referral to additional service centers on and off campus. The counselors subscribe to the confidentiality policy in the ethics and guidelines established by the American Psychological Association.

Academic Counseling

All freshmen, transfer, and readmitted students who have not decided upon an academic major are assigned to an academic counselor. The purpose is to provide academic counseling which will prepare students for enrollment in one of the degree-granting units once they have chosen a major. The counselors are available to discuss the many academic programs offered and to help the students explore these possibilities as they relate to their personal and educational goals.

Career Counseling

Career Counseling affords students an opportunity to explore career options, obtain information relating academic majors to career choices, evaluate employment outlook information, and develop realistic career goals. Through testing, counseling, and group discussion, each person is given the opportunity to make a well-considered career choice.

Athletic Academic Services

The Center for Athletic Academic Services is located in the Fieldhouse and provides counseling, tutoring, scheduling assistance, career planning and special services for all Memphis State student athletes. The Center also handles NCAA interpretations and the academic eligibility requirements of student athletes.

The Testing Center

The Testing Center provides testing services for university and professional school admissions purposes as well as for licensure and certification in a variety of professional areas. The Center also offers a variety of personality and psychological tests.

Educational Support Program

The Educational Support Program provides free tutorial programs in reading, English composition, mathematics, foreign language, and learning skills. Private tutors for specific courses are also available. Individual and group consultation, as well as audio-visual and programmed instruction, are available.

OFFICE FOR STUDENTS WITH DISABILITIES

The Office for Students with Disabilities provides information and specialized support services that enable students with disabilities to take full advantage of the educational opportunities at Memphis State. Services include pre-admission

planning; early registration; coordination of modified housing accommodations; attendant referral; arranging readers, tutors, notetakers, interpreters; assistance in securing special materials, equipment and adaptive aids; campus shuttle service; and liaison with state rehabilitation agencies. Some of these services require two to three months advance notice to arrange. Applicants should provide sufficient notification to the Office for Students with Disabilities of any anticipated needs and their expected date of enrollment. Given adequate time, experienced staff can provide assistance in evaluating individual disability-related needs and in developing a plan of appropriate services.

All persons who have a disability or a handicap are encouraged to register with the Office for Students with Disabilities at the time application is made to the University. This registration entitles a student to the legal rights accorded to people with disabilities and makes it possible to receive assistance with pre-enrollment planning. For more specific information, please contact the Director of the Office for Students with Disabilities.

Persons with documented learning disabilities should contact the director of the Office for Students with Disabilities for additional information and assistance with the admissions application process prior to making application.

UNIVERSITY HEALTH CENTER

Location and Hours: The University Health Center, located at the corner of DeSoto and University, is open Monday through Friday, 8:00 A.M. to 4:30 P.M. Major emphasis is on the diagnosis and treatment of short-term acute, episodic medical illness on an outpatient basis.

Eligibility for Care: Students will be given priority for services; however, medical services are available to faculty and staff members. Although services are free of charge, each visit requires that the individual present a validated identification card before treatment, except in cases of emergency.

Services: The center is staffed by physicians, nurse practitioner, registered nurses, medical and x-ray technologists, and various administrative support personnel. Specialty clinics include: nutrition, and family planning. In addition, the Center will loan crutches and wheelchairs, verify disabilities, and authorize Handicapped Parking decals. Prescriptions may be filled at the pharmaceutical dispensary.

Health Insurance: The university has authorized and approved a private insurance company to provide coverage, which the student pays for directly. Details pertaining to this insurance are available at the time of registration and from the center.

UNIVERSITY PLACEMENT

Placement services are provided to assist communication between graduating students, alumni and communicate with prospective employers. Services include personal credential files, on-campus interviewing, employment opportunity listings, career library, placement counseling, and placement workshops. Advance registration is required before using the services and should be completed two semesters before graduation.

Placement services are also available for students in teacher education and alumni seeking teaching positions through the Teacher Placement Office.

Part-time and temporary employment opportunities are coordinated by a branch office of Tennessee Employment Security.

MINORITY AND INTERNATIONAL STUDENT AFFAIRS

The Office of Minority and International Student Affairs advises minority and international students. The office deals with the social, academic, personal, and financial concerns of minority students as well as with the transportation, immigration, housing, health, and personal concerns of international students.

Besides advising individual students, the office advises 22 different organizations for minority and international students. The Black Student Association is a multipurpose organization which focuses on enlightening individuals about the black culture. It provides a support system which addresses the student's academic needs and also provides an MSU black alumni network which aids the students employment needs. The BSA produces a bi-monthly paper, The BSA Journal, which keeps the students informed of issues relating to blacks at MSU and in the Memphis community. The BSA and fourteen (14) other black student organizations sponsor approximately 160 cultural, social, and academic programs during the academic year.

The International Student Association organizes social and cultural events as a means of increasing student involvement and easing the international student's transition into the American way of life. International Night, the biggest event of the year, provides an opportunity for the students to share their traditional foods and entertainment with the MSU and Memphis community. During the year, various international student organizations sponsor events centered around their respective countries.

ENROLLMENT MANAGEMENT

STUDENT RELATIONS

As a branch of the department of Enrollment management, Student Relations serves to assist prospective students wishing to gain admittance to all undergraduate degree programs within the University. All inquiries regarding admission, financial aid, and scholarships should be addressed to this office.

ORIENTATION

New student orientation serves to acquaint entering freshmen and their parents with registration procedures, university regulations, degree programs and student services. Orientation sessions are offered throughout the summer preceding fall registration.

VETERANS SERVICES

Location and Hours: Veterans Services is located in Scales Hall Room 212. Normal hours of operation are from 8:00 A.M. to 4:30 P.M., Monday through Friday.

Mission: The Office of Veterans Services provides assistance for eligible National Guard/Reserves, veterans and/or dependents who enroll at Memphis State University and who make application for: (1) Programs of Education or Training, (2) VA Tutorial Services, or (3) VA Educational Loans. Other assistance includes: liaison with Veterans Administration Regional Office, counseling, and counseling referral for personal, family, career, financial, and educational problems.

Applications for VA Benefits: Anyone who will be using VA educational assistance while enrolled at Memphis State should contact the Office of Veterans Services. They should also be prepared to furnish the following items as applicable:

1. The number 4 copy of the DD214 or other armed forces separation papers. NOTE: Original or certified copies only. Copies can be made and certified in Memphis at the VA Hospital, Suite 3, Veterans Benefits Counselor's Office.
2. Copy of Delayed Enlistment Contract.
3. Copies of children's birth certificates and marriage licenses.
4. Copy of final divorce decree if either veteran or spouse has been previously married.
5. VA file number if benefits have been used previously.

Advance Pay: Advance payment is available for eligible veterans and dependents who plan to enroll on at least a half-time basis. Applications will be accepted in the Veterans Services Office as early as 90 days before the term begins but no later than 45 days prior to the beginning entry. Generally, the advance pay deadline

for the fall semester is around July 15, while spring semester deadline is around November 15. Advance pay checks include an allowance for the month or fraction thereof in which the course begins and the allowance for the following month. Advance pay checks are mailed to the school for delivery to the student at registration. Initial applicants who do not apply for advance pay may expect their check to be mailed to their home within six to eight weeks after registration.

Enrollment Status: For VA benefits, generally 12 semester hours constitute a full-time load for undergraduate students; 9 hours is full-time for graduate students. The Veterans Administration places restrictions on those who receive veterans educational benefits. Some of these restrictions are: (1) regular class attendance, (2) satisfactory academic progress, and (3) adherence to a specific degree plan.

Degree Plan: Only courses that are required for the degree and major may be certified for VA pay. VA will not pay for repeat courses if the grade already earned is accepted by MSU and will fulfill graduation requirements toward the declared degree and major (even if the course was taken at another institution with or without use of the G.I. Bill). VA will not pay for elective courses in excess of those needed to meet graduation requirements.

Certification: Enrollment certifications are mailed to the VA Regional Office in Nashville upon receipt of the Veterans Data Sheet. Students are required to submit this form to the Veteran Services Office at MSU each semester. Students will be certified on a term by term basis. Pre-certification will only be done when a request for advance pay is made.

STUDENT LIFE

Student Life is one of the many components of the university community that offers students a wide variety of learning experiences outside the formal classroom setting. Included in the area of Student Life are: Student Government, Greek Affairs, Student Organizations, Religious Affairs, and Student Activities Council, as well as other activities. More information may be obtained from the Office of the Associate Dean for Student Life.

Student Government

The Student Government Association represents student opinion in working with other university components. Students may serve in the executive, legislative, or judicial branches or on committee.

Religious Affairs

Several religious organizations maintain meeting facilities close to campus or meet in university facilities. These organizations provide activities adapted to the needs of university students and are designed to aid

in the continuing religious growth and development of members of the university community. The organized religious groups include: Baptist Student Union, Barth House (Episcopal Student Center), Bellevue Christian Fellowship, Campus Crusade for Christ, Catholic Student Center, Chi Alpha Christian Fellowship, Christian Student Center (Church of Christ), Fellowship of Christian Athletes, Inter-Faith Council, Islamic-Quranic Association, Jewish Student Union, Latter Day Saint Student Association (Mormon), Muslim Student Association, Navigators, 20th Century Christians, United Students for Christ, Wesley Foundation (United Methodist), and Westminster House (Presbyterian).

General Fraternities and Sororities

Sixteen national fraternities and twelve national sororities are active on the Memphis State campus. The university strives to maintain a strong Greek system through coordination of Greek activities provided by the Office of Student Organizations and Greek Affairs in areas of social service, scholarship, spiritual life, social development, and sense of leadership.

Fraternities: Alpha Epsilon Pi, Alpha Tau Omega, Alpha Phi Alpha, Kappa Alpha, Kappa Alpha Psi, Kappa Sigma, Lambda Chi Alpha, Omega Psi Phi, Phi Beta Sigma, Phi Gamma Delta, Phi Sigma Kappa, Pi Kappa Alpha, Pi Kappa Phi, Sigma Alpha Epsilon, Sigma Chi, and Sigma Phi Epsilon.

Sororities: Alpha Chi Omega, Alpha Gamma Delta, Alpha Delta Pi, Alpha Kappa Alpha, Delta Gamma, Delta Sigma Theta, Delta Zeta, Phi Mu, Pi Beta Phi, Sigma Gamma Rho, Sigma Kappa, and Zeta Phi Beta.

University Center

The University Center is the focal point for activities and events in the university community. Along with its many programs and activities, the center provides conveniences such as food service, automatic banking, bookstore, ticket office, game-room, rental lockers, television room, vending, copy machine, public phones, and central scheduling and information area. The center is an organization with programs designed to encourage students and other members of the community to meet and share interests and talents in an action-learning setting.

Student Activities Council

Student Activities Council is the principal programming body for the university community. It is composed of student volunteers for the purpose of providing social, cultural, recreational and educational activities, and events that appeal to all tastes. Concerts, fashion shows, art exhibits, Miss Memphis State, movies, speakers, and tours are just a few of the many activities planned and facilitated by Student Activities Council.

Adult and Commuter Student Services

Adult and Commuter Student Services advises the student who is beginning or returning to college after some time in the work place or home as well as the student who lives in the community during his or her academic career. This office assists with admission, academic, financial, employment, and social concerns, whether they are undergraduate or graduate students. A newsletter, OPTIONS, is distributed regularly throughout the year with information on campus services and programming. A referral service for babysitters and other child care information is also provided for students.

Located in the University Center, Adult and Commuter Student Services maintains the Adult Information Center, a resource and study area open during the academic term with evening and Saturday hours. Information regarding on and off campus events, services, and special programming is regularly posted. Tutorial services are provided on a walk-in basis for most disciplines offered at the university. Information on the Adult Scholarship program and external sources of scholarship aid is maintained in a data bank accessible to all.

WARMLINE and the Adult Student Association are of special interest to the adult learner. WARMLINE is a peer counseling service staffed by graduate students. It is an informal way for students to receive support during their educational experience and to express concern about any particular issues that may arise. "Lifelong learning with friends" is the motto of the Adult Student Association, a network for the returning student that organizes informational, social, and cultural events.

Intramurals and Recreation Services

As a division within the Department of Health, Physical Education and Recreation, the intramural and recreation program is designed to fulfill a vital educational function and provide students, faculty and other members of the university community the opportunity to participate in a variety of activities for personal enjoyment and satisfaction.

The H.P.E.R. Complex provides excellent facilities for instructional, intramural and sports programs. The sports activities including individual and group, range over approximately 30 different sports. The Division supervises recreational use of the H.P.E.R. Complex; provides for the loan and rental of sports and camping equipment; provides for the reservation of tennis courts, racquetball-handball courts and other play areas; organizes intramural tournaments; sponsors leisure course series, clinics and events; and coordinates a sports club/activity program. The student oriented Intramural and Recreation staff gives personal attention to the needs of individual students, faculty and staff.

OTHER ACTIVITIES AND SERVICES

Publications

Students write and edit *The Helmsman*, the university newspaper (4 issues per week); and the *DeSoto*, the university yearbook, under the auspices of the Department of Journalism. Students in the department's magazine emphasis edit and publish a non-fiction, annually, a magazine, *MSU Today*.

The University Store

The University Store is owned and operated by the university for the convenience of its students, faculty and staff. In addition to textbooks and required school supplies, the store handles a large selection of general books, complete line of insignia clothing and gift merchandise, microcomputers, art supplies, and a variety of items for the convenience of the resident students.

Post Office

The University Post Office has post office boxes available for rent by students and faculty. Students living in university housing have post office boxes located in these facilities, charges for which are included in the residence hall rent. Student mail should be addressed to the proper post office box number, Memphis State University, Memphis, Tennessee 38152.

Automobiles on Campus

Each student who expects to operate and park any motor vehicle on the campus of Memphis State University must register it in the Security Office and receive an official permit. Permits are valid for one semester only and must be purchased at the beginning of each semester. Limited parking space necessitates close regulation of traffic. Each student is responsible for being familiar with the campus traffic and parking regulations, copies of which are available in the Security Office.

Art and Music

The Art Department sponsors visiting artists and lecturers, workshops and symposia. The University Gallery provides students and the community with a full exhibition schedule of contemporary and historical art, as well as permanent collections of African Art, Egyptian Art, contemporary prints, and other varied pieces.

The Department of Music offers activities and programs in which students may participate as individuals or as groups. Qualified students, regardless of major, may participate in the numerous musical groups including the University Symphony Orchestra, the University Bands, and a variety of choral groups and small instrumental ensembles. Additionally the university's state-of-the-art 24 track recording

studios are open for student use after proper instruction.

Theatre

Students are invited by the Theatre and Communication Arts Department to audition for roles in plays, a Lunch Box Experimental Theatre, Readers' Theatre, and an original script program.

Communications

Programs in radio, television, and film are offered by the area of Communication Arts. WSMS-FM 92 is student operated. Two state-of-the-art television/film studios also offer students the opportunity to participate in broadcasting quality productions.

Goodwyn Institute Lectures

The lectures and addresses offered by the Goodwyn Institute cover a variety of subjects. The purpose of these lectures is to provide a system of continued education for adults and youths along general and special interests, concentrating on illustrated lectures covering all areas of the world, and to afford authoritative and accurate information upon practical and cultural subjects.

HONORS AND AWARDS

HONOR SOCIETIES

Alpha Epsilon Delta, international pre-medical honor society

Alpha Kappa Delta, the national honorary society in sociology

Alpha Lambda Delta, a national honor society for freshman students

Beta Beta Beta, national honor society in biology

Beta Gamma Sigma, the national honor society for business majors

Chi Beta Phi, a national science and mathematics honorary society

Dobro Slovo, an honor society organized to further the study of Slavic literature

Gamma Beta Phi, an honor and service society

Gamma Theta Upsilon, a national honorary society for geography students

Golden Key National Honor Society, a national interdisciplinary honor society for academically outstanding juniors and seniors

Honors Students Association, an organization for University Honors students

Kappa Delta Pi, a national honor society in education

Kappa Omicron Phi, a national honor society for home economics students

Kappa Tau Alpha, a national honor society for journalism and mass communications juniors and seniors

Liberal Arts Honor Society, a local academic honor association founded by Phi Beta Kappa faculty members

Mortar Board, a national honor society established to provide for cooperation among honor societies for seniors

Omicron Delta Epsilon, an international economic honor society

Omicron Delta Kappa, the National Leadership Honor Society

Phi Alpha Theta, the national honor society in history

Phi Eta Sigma, a national freshman honor society

Phi Kappa Phi, a national interdisciplinary honor society

Pi Delta Phi, a society to recognize outstanding scholarship in French language and literature

Pi Kappa Lambda, a national honorary society for music education students

Pi Sigma Alpha, the national honor society in political science

Pi Tau Sigma, the national honor society in mechanical engineering

Psi Chi, the national honor society in psychology

School of Nursing Honor Society, a local academic honor association founded by Sigma Theta Tau faculty members, students and alumni of the School of Nursing

Sigma Delta Pi, the national Spanish honor society

Sigma Pi Sigma, a national honor society for physics students

Sigma Tau Delta, a national honor society for English language and literature students

Tau Alpha Pi, a national honor society for engineering technology students

Tau Beta Pi, a national engineering academic honor society

Who's Who Among Students in American Universities and Colleges, one of the highest honors that a student may receive at Memphis State University

Honors and Awards

THE COLLEGE OF ARTS AND SCIENCES

THE BETA BETA BETA AWARD is annually presented to the graduating senior and member of the Society who graduates with the highest grade point average in biology.

THE AMERICAN INSTITUTE OF CHEMISTRY AWARD is presented to the graduating chemistry major who best demonstrates leadership, ability, character and scholastic ability.

THE DEPARTMENT OF CRIMINAL JUSTICE presents annually the Mu Sigma Chi Professional Criminal Justice Award to the student of criminal justice deemed outstanding in professional activities.

THE DEPARTMENT OF ENGLISH offers several awards:

a. The Distinguished Scholarship Award presented each year to the English major whose work demonstrates an unusually high order of academic excellence.

b. Honors Thesis Award presented in recognition of the outstanding honors thesis submitted during the previous academic year by a student in the English Honors Program.

c. Freshman Writing Awards: Presented for creative excellence shown by freshman writers of essays, poetry, and fiction.

FRENCH GOVERNMENT ASSISTANTSHIPS: The French Government through the French Embassy in The United States, on the recommendation of the French Section of the Department of Foreign Languages, awards each year one or more assistantships in France for the teaching of English in secondary schools.

THE DEPARTMENT OF GEOLOGICAL SCIENCES annually presents the Outstanding Senior Award to the outstanding major exhibiting scholarship, leadership and service.

THE DEPARTMENT OF GEOGRAPHY AND PLANNING presents each year the Paul H. Sisco Award to the outstanding senior geography major.

THE DEPARTMENT OF HISTORY annually presents the Tennessee Historical Commission Award to that senior student of history judged by the faculty to be the outstanding history major.

THE DEPARTMENT OF MATHEMATICAL SCIENCES annually presents the R. P. Clark Memorial Award to an outstanding junior.

THE DEPARTMENT OF PHILOSOPHY OUTSTANDING STUDENT AWARD is presented to that student of philosophy chosen on the basis of high scholastic achievement, papers written, and performance in senior honors seminars.

THE DEPARTMENT OF PHYSICS presents each year the Outstanding Student Award to the most distinguished senior physics major.

THE DEPARTMENT OF POLITICAL SCIENCE presents the Outstanding Student Award each year to the graduating senior majoring in political science who has compiled the best record of academic achievement in the discipline. Also The John W. Burgess Award is presented for meritorious achievement in political science.

THE PUBLIC LAW AWARD is presented for academic excellence in the field of public law.

THE DEPARTMENT OF PSYCHOLOGY presents annually The Dr. Milton C. Addington Award for Excellence in Psychology to the senior psychology major exhibiting the most individuality, interest, initiative, integrity, creative ability and originality.

THE DEPARTMENT OF SOCIOLOGY annually presents The Outstanding Student Award to the senior student judged to be the outstanding sociology major. Also, the DIVISION OF SOCIAL WORK presents the Graduate with Distinction Award to the graduate who has been selected for dedication, achievement, and potential for professional service.

ALPHA EPSILON DELTA, pre-medicine and allied health professions honor society, annually presents the Student of the Year Award to the member who has demonstrated outstanding leadership, loyalty and responsibility.

CHI BETA PHI SCIENCE AWARDS: The student who has attained the highest academic average during his four years of study in each of the following disciplines: Biology, Chemistry, Geology, Mathematical Sciences, Physics, and Psychology is honored by having his/her name inscribed on a plaque.

THE FOGEY COLLEGE OF BUSINESS AND ECONOMICS

THE TENNESSEE SOCIETY OF CERTIFIED PUBLIC ACCOUNTANTS AWARD, Memphis Chapter, is presented annually to the graduating student who has the highest overall scholastic average among all accountancy majors.

THE MEMPHIS CHAPTER OF THE SOCIETY OF CHARTERED PROPERTY CASUALTY UNDERWRITERS annually awards a check and a plaque to the outstanding student in the field of insurance.

SOCIETY FOR ADVANCEMENT OF MANAGEMENT SCHOLARSHIP is annually awarded to that member of SAM who has served the society in an exemplary manner and demonstrated leadership in the field of management.

THE NATIONAL BUSINESS EDUCATION ASSOCIATION annually awards a certificate of merit, a one-year subscription to the N.B.E.A. Forum magazine, and a one-year membership card in the Association to the outstanding graduating senior who has majored in the field of business education.

DELTA SIGMA PI, international business fraternity, annually awards a scholarship key to the man in The Fogelman College of Business and Economics graduating with the highest academic average in business.

THE UNION PLANTERS/MSU FOGELMAN COLLEGE ALUMNI CHAPTER SCHOLASTIC ACHIEVEMENT AWARDS are awarded each semester to three graduating seniors in recognition of their outstanding scholastic achievement in the College. Award includes a check and their names inscribed on a plaque.

THE COLLEGE OF COMMUNICATION AND FINE ARTS

DEAN'S ACADEMIC ACHIEVEMENT AWARD is available to a student majoring in a discipline within the College of Communication and Fine Arts. It recognizes the graduating student with the highest grade point average.

DEAN'S CREATIVE ACHIEVEMENT AWARD is based on outstanding creative activity in the areas encompassed by the College of Communication and Fine Arts.

CREATIVE ACHIEVEMENT IN ART is awarded annually by the Department for outstanding creative achievement in art to a student majoring in art.

"BEST OF SHOW AWARD," JURIED STUDENT EXHIBITION is awarded annually to the student whose work is judged "Best of Show" in the Annual Juried Student Exhibition in the University Gallery.

THESIS AWARD IN ART HISTORY is presented in recognition of an outstanding masters thesis in art history.

ART HISTORY GRADUATE AWARD is presented annually to a graduate student for outstanding initiative and research.

ART HISTORY UNDERGRADUATE AWARD is presented annually to an undergraduate student for outstanding work in art history.

INTERIOR DESIGN ALUMNI STUDENT DESIGN AWARDS at the sophomore, junior and senior levels are given for the best design of a given project.

SIGMA DELTA CHI CITATION, Memphis Chapter, annually presents a certificate of achievement to the student chosen as outstanding in the field of journalism.

SOCIETY OF PROFESSIONAL JOURNALISTS, SIGMA DELTA CHI MARK OF EXCELLENCE AWARDS, Arkansas, Louisiana, Mississippi, West Tennessee Region, annually presents first place awards for Best TV Broadcasting, Best Editorial Cartoon, Best Feature Article, and Best Photography Feature.

SIGMA ALPHA IOTA COLLEGE HONOR AWARD annually presents an award based on musicianship, scholarship, and general contribution to the Collegiate Chapter.

SIGMA ALPHA IOTA HONOR CERTIFICATE is presented annually to the music major graduating with the highest academic average.

PAUL EAHEART MEMPHIS WOODWIND QUINTET SCHOLARSHIP is presented in honor of Paul Eaheart for excellence in wind performance.

NAOMI C. HAIMSOHN AWARDS IN CLASSICAL MUSIC COMPOSITION are presented annually to the graduate student and the undergraduate student who are judged to have written the best compositions for that year.

HERMANN PIANO AWARD is presented annually in memory of Professor Herbert Hermann for excellence in piano performance.

LUBRANI CLARINET AWARD, in memory of Professor Frederic Lubrani, is presented for performance ability, general scholarship, service to the Music Department, and potential in the profession.

SMIT COMPOSITION AWARD is presented in memory of Professor Johannes Smit for excellence in composition.

HEARST AWARDS are presented as the result of an annual national writing and photography competition among accredited journalism programs for work appearing in student publications. Cash prizes range from \$200 to \$2,000 with matching awards going to sponsoring journalism departments.

KATHY KRIEGER MEMORIAL AWARD is awarded to students majoring in broadcasting based on academic merit, involvement in programs, and involvement with FM92 Radio Station.

HOHENBERG FOUNDATION, INC. AWARD is presented annually to a student pursuing a Bachelor of Fine Arts degree with a concentration in Dance. The recipient must have at least a 2.50 GPA.

THE COLLEGE OF EDUCATION

ELEANOR MAE FERGUSON AWARD is presented each year to the outstanding junior or senior woman physical education major who displays strong leadership, outstanding character, high scholarship and an active role in departmental and campus activities.

RALPH HATLEY, SR. AWARD is presented to the outstanding junior or senior male physical education major who displays strong leadership, outstanding character, high scholarship and an active role in departmental and campus activities.

THE DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION OUTSTANDING SENIOR IN RECREATION AND PARKS AWARD is presented annually in recognition of meritorious scholarship, leadership and service to the university, the community and the profession.

THE DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION OUTSTANDING GRADUATE STUDENT IN RECREATION AND PARKS AWARD is presented annually in recognition of meritorious scholarship, leadership and service to the university, the community and the profession.

THE DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION HEALTH EDUCATION HONOR AWARD is presented annually to the undergraduate health education major with the highest overall grade point average.

THE DEPARTMENT OF SPECIAL EDUCATION OUTSTANDING SENIOR AWARD is presented annually to an outstanding senior majoring in special education and rehabilitation who displays strong leadership, outstanding character, scholarship and an active role in departmental and campus activities.

THE KAPPA DELTA PI JUNIOR ACADEMIC ACHIEVEMENT AWARD is presented annually to the junior having the highest grade point average.

THE KAPPA DELTA PI SENIOR ACADEMIC ACHIEVEMENT AWARD is presented annually to the senior having the highest grade point average.

THE DEPARTMENT OF HOME ECONOMICS AND DISTRIBUTIVE EDUCATION KAPPA OMICRON PHI AWARD is presented to a junior or senior member of the Kappa Omicron Phi in recognition of leadership, scholarship and service.

THE DEPARTMENT OF HOME ECONOMICS KAPPA OMICRON PHI AWARD is presented to a junior or senior member of the Kappa Omicron Phi in recognition of leadership, scholarship and service.

THE DEPARTMENT OF HOME ECONOMICS OUTSTANDING SENIOR AWARD is presented each year to the graduating senior in the department with the highest academic average.

THE MARQUITA L. IRLAND SCHOLARS AWARD is presented annually to a spring graduate with outstanding contributions in the areas of leadership, service to the community and the profession of home economics, and scholarship.

THE MEMPHIS EDUCATION ASSOCIATION AWARD is presented each year to the graduating senior who, having graduated from the Memphis City Schools System and completed all college level work in a teacher education program at the university, has attained the highest grade point average of the students in this category.

THE HEBER E. RUMBLE OUTSTANDING STUDENT TEACHER AWARD is presented each year to the student whose performance in student teaching is judged to be the most outstanding.

THE DEPARTMENT OF CURRICULUM AND INSTRUCTION OUTSTANDING EARLY CHILDHOOD MAJOR AWARD is presented annually to the early childhood education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.

THE DEPARTMENT OF CURRICULUM AND INSTRUCTION OUTSTANDING ELEMENTARY EDUCATION MAJOR AWARD is presented annually to the elementary education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.

THE DEPARTMENT OF CURRICULUM AND INSTRUCTION OUTSTANDING SECONDARY EDUCATION MAJOR AWARD is presented annually to the secondary education major who has demonstrated outstanding scholarship, involvement in professional organizations, and professional potential.

THE DEPARTMENT OF CURRICULUM AND INSTRUCTION OUTSTANDING MASTER'S DEGREE CANDIDATE AWARD is presented to the master's candidate who has demonstrated outstanding scholarship, involvement in professional organizations, and professional integrity.

THE DEPARTMENT OF FOUNDATIONS OF EDUCATION OUTSTANDING GRADUATE STUDENT AWARD is presented annually to the most outstanding student enrolled in the department on the basis of scholarship, accomplished or planned research, teaching competency or professional involvement, and faculty rating.

THE DEAN'S AWARD is presented annually on the basis of scholarship, professionalism, leadership, and service to the College of Education, the university, and/or professional organizations.

THE HERFF COLLEGE OF ENGINEERING

OUTSTANDING SENIOR AWARDS in the College of Engineering are presented to the outstanding senior in each of the four departments: Civil Engineering, Electrical Engineering, Mechanical Engineering, and Engineering Technology based on scholarship.

OUTSTANDING STUDENT MEMBER OF IEEE is presented an award by The Institute of Electrical and Electronics Engineers, student chapter.

ENGINEERING TECHNOLOGY SOCIETY AWARD is annually presented to the outstanding student by the student chapter.

ASSOCIATED GENERAL CONTRACTORS AWARD is presented annually by the student chapter for outstanding achievement.

FRED H. KELLOGG AWARD is presented annually to the outstanding student in civil engineering.

ASHRAE AWARD is presented annually to the outstanding junior in mechanical engineering.

ENGINEERING DEAN'S AWARD is presented annually to the graduating student who has compiled the highest academic achievement in the college.

SCHOOL OF NURSING

HIGHEST ACADEMIC ACHIEVEMENT AWARD is presented annually by the Memphis State University Nursing Alumni Association to the graduating senior in nursing who has the highest overall scholastic average.

OUTSTANDING STUDENT AWARD is presented annually to the graduating senior in nursing who best demonstrates academic achievement, leadership and professionalism.

UNIVERSITY COLLEGE

DISTINGUISHED SPECIAL PROJECT AWARD is presented to each student whose special project has been judged outstanding by the Faculty Council of University College.

ALUMNI ASSOCIATION AWARD is given each semester to the graduate who has received the highest grade point average in his or her coordinated study.

FACULTY COUNCIL AWARD is presented to the graduating senior, each commencement, who has earned the highest overall grade point average.

EDWARD A. HAMILTON FIRE FIGHTER SCHOLARSHIP is presented to the fire fighter, or fire fighter's dependent, who is a deserving student in need of financial assistance.

DEPARTMENT OF AEROSPACE STUDIES

THE PRESIDENT'S AWARD IS PRESENTED annually to the MSU Freshman or Sophomore AFROTC cadet who has

demonstrated outstanding attributes of leadership and high moral character. Selection is made by AFROTC with final approval by the university President.

ANGEL OF THE YEAR AWARD is presented to the member of Angel Flight who has given the most in service to the campus and the community.

ARNOLD OF THE YEAR AWARD is presented to the member of Arnold Air Society who has given the most in service to the campus and the community.

DEPARTMENT OF MILITARY SCIENCE

SOLDIER'S MEDAL is awarded to a cadet who distinguishes himself by an act of heroism at advanced camp.

ROTC MEDAL FOR HEROISM is awarded to a cadet who distinguishes himself by an act of heroism performed on or off campus.

THE PRESIDENTS AWARD is presented annually to the MSU Senior cadet who has demonstrated outstanding attributes of leadership and high moral character. Selection is made by the Department Chairman with final approval by the university President.

GEORGE C. MARSHALL ROTC AWARD is presented annually to the MSU Senior cadet who has demonstrated outstanding leadership and scholastic qualities.

HUGHES TROPHY AWARD is presented annually to the cadet who is recommended by the Professor of Military Science and the Dean as the most outstanding commissioned graduate based upon his officer potential and academic leadership.

PALLAS ATHENE AWARD is presented annually to the most outstanding graduating female cadet.

NATIONAL DEFENCE TRANSPORTATION ASSOCIATION AWARD is presented annually to the most outstanding Senior cadet who is recommended by the Professor of Military Science and the Dean as being in the top twenty five percent of his ROTC and academic class and possesses an interest in the Transportation Corps.

ARMED FORCES COMMUNICATIONS ELECTRONICS ASSOCIATION HONOR AWARD is presented to a Senior cadet majoring in Math, Chemistry, Physics, Engineering, or photography who is active on campus or academically distinguished and had demonstrated outstanding qualities of military leadership and high moral character.

ALDEN PATRIDGE COMMEMORATIVE AWARD is presented to the top graduating Science or Engineering student in the Army ROTC program.

DISTINGUISHED MILITARY STUDENT/GRADUATE AWARD is presented annually to the Senior cadets who are in the upper third of the ROTC class and upper half of the university class who are active on campus, are outstanding leaders, and possess an aptitude for military service.

DEPARTMENT OF THE ARMY SUPERIOR CADET DECORATION AWARD is presented annually to the outstanding Junior and Senior cadet who has demonstrated academic leader qualities in scholastic and related activities, officer potential, and is in the top twenty five percent of his ROTC and academic class.

AMERICAN LEGION GENERAL MILITARY EXCELLENCE AWARD is presented annually to the outstanding cadet who has demonstrated qualities in military leadership, discipline, character, and citizenship, and is in the top twenty five percent of ROTC and academic class.

AMERICAN LEGION SCHOLASTIC EXCELLENCE AWARD is presented annually to the outstanding Junior and Senior cadet who has demonstrated qualities in leadership, actively participated in student activities, and is in the top twenty five percent of his ROTC class and top ten percent of his academic class.

SOCIETY OF AMERICAN MILITARY ENGINEERS AWARD is presented annually to the Junior and Senior cadet who is recommended by the Professor of Military Science and the Dean as being in the top twenty five percent of his ROTC and academic class and the outstanding engineering student of the year.

ASSOCIATION OF THE UNITED STATES ARMY AWARD is presented to the Junior who contributes the most, through leadership, to advancing the standing of the Military Science Department while in the top twenty five percent of his ROTC class and top ten percent of his academic class.

AMERICAN DEFENSE PREPAREDNESS AWARD is presented annually to the Junior cadet who demonstrated outstanding leader qualities and participated actively in campus activities, placed in the top twenty percent of his platoon at Advanced Camp, received a B or above in all ROTC classes, and is in the upper half of his academic class.

ARMED FORCES COMMUNICATIONS ELECTRONICS ASSOCIATION SCHOLARSHIP AWARD is presented to Basic Course students accepted to the Advanced Course who are of high moral character, in top twenty five percent of his academic class, and need financial assistance in completing a degree in electrical engineering or technical photography.

DAUGHTERS OF THE FOUNDERS AND PATRIOTS OF AMERICA AWARD is presented annually to a Freshman or Sophomore cadet who is in the top twenty five percent of his ROTC class and has demonstrated excellence in History, the potential for good leadership, and related accomplishments reflecting the ideals of patriotism.

DEPARTMENT OF NAVAL SCIENCE

TRIDENT HONOR SOCIETY AWARD is presented to outstanding Naval midshipmen who have demonstrated the highest caliber of academic excellence.

SPECIAL AWARDS

MARIA LEONARD SCHOLARSHIP AWARD is presented annually by Alpha Lambda Delta, national scholastic honor society, to the senior member of the society with the highest academic average.

GOLDEN KEY NATIONAL HONOR SOCIETY presents annually two scholarships to junior and senior members of the local chapter who have excelled in scholarship, leadership and participation in activities.

PHI KAPPA PHI SCHOLARSHIP AWARDS are presented annually to two undergraduate and one graduate member who demonstrate high scholastic ability, excellent leadership, and

provide meaningful service to the university; and, who will continue their studies at the university.

ROSETTA I. MILLER AWARD is presented to the outstanding woman student who has returned to college despite significant hardships.

GREEK ALL-SING FOLLIES SCHOLARS MERIT AWARDS: Scholarships of \$250.00 each are awarded annually by the Interfraternity Council to the pledge/associate from the previous fall or spring semester who attained the highest grade point average; and, to the fraternity member with the highest grade point average over the past two consecutive semesters.

THE WOMEN'S PANHELLENIC COUNCIL annually awards one \$250.00 scholarship to the sorority member who has attained the highest scholastic average. In addition a Pledge Scholarship in the amount of \$250.00 is awarded to the fall semester pledge who attained the highest average for the semester.

TWO PANHELLENIC COUNCIL scholarships are awarded each spring to the PHC fraternity man and sorority woman who have

obtained the highest cumulative grade point average for the previous year. Awards are in the amount of \$250.00 each.

WOMEN'S INTERCOLLEGiate ATHLETICS SCHOLAR AWARD is presented annually to the woman athlete who has maintained the highest grade point average while at the university.

THE ELMA ROANE OUTSTANDING WOMAN ATHLETE AWARD is presented to the junior or senior woman athlete who best exemplifies the following qualities: drive, enthusiasm, determination, concern for others, the love for athletics, maturity, involvement in campus activities, and self-discipline in all aspects of life.

CAMPUS RECREATION AND INTRAMURALS AWARDS are presented annually to the intramural Greek, intramural Independent Resident, Panhellenic Manager of the Year, and to the Outstanding Official of the Year who show leadership and interest in the intramural program.

5. ACADEMIC REGULATIONS

ORIENTATION, ADVISING AND REGISTRATION

The academic year consists of two semesters: the fall semester beginning in late August or early September and ending in December; the spring semester beginning in January and ending in May. A summer session is held between the end of the spring semester and the beginning of the fall semester of the next academic year.

An orientation and academic advising program for all new freshmen is held during the summer preceding regular fall registration. The sessions are conducted in order to acquaint entering students with various programs of study, general university regulations, and registration procedures. Students are assigned advisors who aid them in selecting appropriate courses. **Assistance from the advisor, however, does not relieve the student of the responsibility of studying the Catalog and fulfilling all of the requirements therein** for the specific degree program being pursued. It is expected that the student will consult with the dean of the college in regard to the fulfilling of the requirements for the chosen degree. This should be accomplished prior to the time the student has attained senior standing.

The *Schedule of Classes*, published before the beginning of each semester and available from the Office of the Dean of Admissions, Records, and Registration, contains a detailed outline of the registration procedure and course changes and additions made since the publication of the *Catalog*. Students are urged to study these schedules carefully and to keep them available for immediate reference during the registration period and throughout the semester. All students are encouraged to participate in the advanced registration

period (Priority Registration). A late registration fee is charged beginning the first day of classes, and there is no reduction in other fees.

In no case is credit allowed in any course for which the student is not duly registered and which is not properly entered on the official registration material. Registration is not complete until all fees for the semester have been paid.

NOTE: Please refer to the Schedule of Classes for further information and registration procedures.

APPEALS

A student has the right to appeal decisions made by university officials in the implementation of university policy. If a student feels that individual circumstances warrant an appeal, the request for appeal must be filed in the university office responsible for the implementation of that policy or the office specified in the policy statement.

CLASS ATTENDANCE

Class attendance may be used in computing grades at the discretion of the instructor. If attendance is to be used, a complete written statement of the instructor's policy detailing the weight of attendance in determining the final grade must be presented to all students present at the first and second meetings of the class.

A student who is absent from the final examination without the permission of the teacher incurs a grade of F on the examination and may, depending on the weight of the examination in determining the final grade, incur a grade of F for the course.

Adding and Dropping Courses

After the official registration period is over, students may make adjustments in their schedules through the process of adding and/or dropping courses. (For dates and times, see the *Schedule of Classes*.) Courses dropped through the last day of the Late Registration period will not be shown on the student's permanent record. Courses dropped after the Late Registration period will be indicated on the record as dropped. A student may drop any course or courses up through the date specified in the University Calendar for that term. (The University Calendar is located in the front of this *Catalog*.) Exceptions are made only by the dean or designee in the college in which the student is earning a degree and only on the basis of such unusual circumstances as serious personal illness, relocation because of employment, et cetera. A fee is charged for courses added or dropped. See *Fees and Charges*. To stop attending a class without officially dropping the course incurs the grade of F.

Withdrawal From University

Any student who wishes to officially withdraw from the university must do so in person through the Center for Student Development. Students must complete an application for withdrawal. Failure to officially withdraw will result in grades of F for the courses in which the student is enrolled. Students enrolled in evening classes withdraw in the Evening Academic Services Office. Students enrolled in The Graduate School should report their withdrawals to the office of the Dean of The Graduate School.

Withdrawal is not permitted except on the dates specified in the University Calendar for that term. Exceptions are made to this policy only in cases of such extreme circumstances as serious personal illness, relocation because of employment, et cetera.

Enrollment Transactions

Enrollment transactions include registration, adding and dropping courses, and withdrawing from the university. The official date shall be the date that the student actually pays for the transaction, or files the request in the case of withdrawals, subject to the final review and approval of the Dean of Admissions, Records, and Registration. If the final review reveals any apparent violation of the university's academic regulations and/or contractual relationships between the university and the student, the Dean of Admissions, Records, and Registration has the authority to suspend the transaction pending joint review with the college dean, the department chair, and the student's academic advisor. If the joint review verifies the legitimacy of the transaction, the official date will be that originally established. If the joint review culminates in a finding that academic regulations and/or contractual relationships have been violated, the entire transaction may be permanently invalidated.



CLASSIFICATION OF STUDENTS

Classification of students is based on the number of college level credit hours earned as shown in the following table.

Classification	Semester Hours
Freshman	0-24
Sophomore	25-54
Junior	55-84
Senior	85 or more
Special	Students not working on a degree

Students who have completed the required number of hours to be classified as juniors but who have not completed their basic requirements in the Lower Division should schedule these uncompleted requirements during the first semester following in which such courses are available in order to avoid a possible delay in graduation.

Credit Hours and Maximum Load

The unit of credit at Memphis State University is the semester hour; a semester hour is defined as the credit earned for the successful completion of one hour per week in class for one semester; or two hours per week of laboratory for one semester. (A course which gives three semester hours credit will normally meet for three lecture or recitation hours per week; or for two lecture or recitation hours and two laboratory hours per week; or for some other combination of these.) Each lecture hour presupposes a minimum of two hours preparation on the part of the student.

The minimum credit hour load for classification as a full-time student and the maximum loads are found in the table

below. The maximum credit hour load includes all course enrollments for any term, both at Memphis State University and any concurrent enrollment at other institutions. It does not include credit by examination. No student is permitted to enroll for correspondence or extension courses while carrying a maximum credit hour load.

ACADEMIC FULL-TIME CLASSIFICATION AND MAXIMUM LOAD

Term	Minimum Hours	Maximum Hours
Fall or Spring	12	**18
First or Second Summer	*	8
Extended Summer only	*	16
Extended and First or Second	*	11
Extended and First and Second	*	16

*Any enrollment of less than 12 hours for all summer terms combined is defined as being less than full-time. The minimum hours of enrollment required for full-time classifications is 12 hours for any combination of Extended, First and Second Summer Terms.

**This maximum hour total includes neither the Applied Music Workshop (MUAP 1000) nor the courses approved by the university to meet the physical activity course degree requirement. (See *Graduation from the University* for listing of approved courses.) A student who has a B (3.0) average or better for a semester may schedule, with the permission of the dean of the college from which the student is seeking a degree, a maximum of twenty-one hours for the following semester. Any or all of the above requirements may be waived at the discretion of the college dean or the dean's designee.

NOTE: ID card validation of full-time for student activity purposes is based on a minimum of six credit hours per semester and does not necessarily constitute a full-time academic load.

The maximum course load for any combination of concurrent summer terms is eleven semester hours. The student's course load for the entire summer session

may not exceed 16 semester hours. (This may differ from requirements for the Veterans Administration. Questions should be directed to the Coordinator of Veterans Services.)

SCHOLASTIC STANDARDS

Grades and Quality Points

GRADES

At the end of each semester or summer term, instructors report to the Records Office the standing of all students in their classes. The grade of a student in any course is determined by class standing and examination, combined in such proportion as the instructor in charge of the course may decide. Class standing in any course is determined by the quality of the student's work and the thoroughness of preparation.

The instructor's evaluation of the student's work is expressed by the following grades which are converted to quality points for the purpose of averaging grades.

Grade	Quality Points	Grade	Quality Points
A, Excellent	4	T (See below)	0
B, Good	3	CR, Credit	0
C, Satisfactory	2	DP, Drop	0
D, Poor	1	W, Withdraw	0
F, Failure	0	AD, Audit	0
I, Incomplete	0	*S, Satisfactory	0
		*U, Unsatisfactory	0

*The S/U grade is limited to certain types of courses such as practicums, practice teaching, etc. The IP (In Progress) notation may also be used in certain research courses to allow students time to complete research projects. These grades are only awarded for those undergraduate courses for which it is indicated in the course descriptions.

All courses for which the student is registered are recorded as passed (with a

letter grade), "T", failed, dropped, withdrew, audit, credit, satisfactory, unsatisfactory, or incomplete. In no case is credit allowed in any course for which the student is not duly registered and which is not properly entered on the official registration materials.

Grade of Incomplete

The grade of I (incomplete) indicates that the student has not completed the course for some unavoidable reason that is acceptable to the instructor. Unless the student completes the requirements for removal of "I" within forty-five days from the end of the semester or summer session in which it was received, the grade of "I" will be changed to an F, regardless of whether the student is enrolled or not. Extensions may be granted if the instructor's temporary absence from the campus makes it impossible for the student to remove the incomplete or other circumstances acceptable to the instructor. *Grades of incomplete earned during the student's semester of proposed graduation will delay the student's graduation until the end of the semester during which the incomplete is removed.*

All grades, with the exception of "I," when reported, can be changed only by the instructor who reported them and then only after approval by the Admissions and Records Committee. There is a Grade Appeals procedure described below.

"T" Grade

In order that students may be permitted to complete independent studies courses in variable time periods which might exceed a regular enrollment period, the "T" grade has been introduced. The following procedure governs the use of the "T" grade:

1. Prior to the registration period, the professor obtains approval of the chair and dean to use the "T" grade in a course(s).
2. The dean notifies the Records Office of courses for which the "T" grade may be awarded.
3. At the end of the regular term, the faculty member has the following options:
 - a. Award grades A-F.
 - b. Award an "I" grade if the faculty member feels that the work can be completed in 45 days. (If an "I" grade is awarded, a runner with the student's name on it will be sent to the faculty member during the 45 day period. The faculty member *must record* either an A-F or the "T" grade to prevent an automatic assignment of "F".)
 - c. Award a "T" grade. If the "T" grade is awarded, the student must re-register for the course in order to earn credit. The "T" grade is not used in the computation of QPA.

Repetition of Courses

A student may repeat most courses in an attempt to improve the grade previously earned. There are some courses which may not be repeated for this purpose. Information concerning these courses may be obtained from the office of the chair of the department in which the course is offered.

A student may not attempt the same course more than three times for the purpose of obtaining a passing grade or higher grade. Exceptions to this limitation

may be made by the dean of the college from which the student intends to graduate. These exceptions must be approved prior to the student's registration for the fourth and any subsequent attempts of the same course.

The student's quality point average will be computed as follows:

Attempt	Grade(s) Included In Computation
1st	Original grade earned
2nd	Only grade in 2nd attempt
3rd and subsequent	Grades earned in 2nd and all subsequent attempts calculated in quality point average.

The record will continue to reflect all grades earned in the same course.

Audit Courses

Students who are registered for one or more classes at Memphis State University may also register to audit a course with the approval of the chair of the department in which the course will be offered.

Auditors are not required to prepare lessons or papers, or take examinations. They are not to take part in class discussions or laboratory or field work. Students auditing a course will receive "audit" on the transcript only if in the judgment of the instructor they have attended a sufficient number of classes to deserve the notation on the transcript. Faculty will base their decisions for awarding "audit" only on attendance as the student is not allowed by policy to participate in any other way.

Persons who are not enrolled for credit courses may register for audit courses with the approval of the Dean of Admissions, Records, and Registration and the department chair. These persons must have graduated from high school or be 18 years of age or older. A student may not change from a grade point basis to audit or from audit to a grade point basis after the last day to add classes for that term. Fees for audits will be assessed on the same basis as fees for credit courses.

Credit/No-Credit Courses

The university, wishing to encourage mature students to broaden their range of interest without jeopardizing their grades, allows students who have earned at least 60 semester hours with a minimum grade point average of 3.0 to enroll in credit/no-credit courses as determined by their college. The student is limited to one course per term and may not accumulate more than 12 semester hours on a credit/no-credit basis. (In most cases, Physical Activity courses are exempted from these requirements. See *Graduation from the University*.) A student who transfers from one college to another should be aware that credit/no-credit hours may be acceptable in one and not in another. A student may apply to take, on a credit/no-credit basis, a course which has previously been taken for a grade. In every instance, approval to register for a course on a credit/no-credit basis must be obtained from the advisor and the dean of the student's degree granting college. Credit hours earned on a credit/no-credit basis will be accepted toward degrees within the following limitations:

The College of Arts and Sciences accepts hours earned on a credit/no-credit basis in any course which is not required for the student's *degree*.

The Fogelman College of Business and Economics accepts hours earned on a credit/no-credit basis only in courses which are designated as electives in the student's *degree* program.

The College of Communication and Fine Arts accepts hours earned on a credit/no-credit basis in any course which is not required for the student's *major*.

The College of Education accepts hours earned on a credit/no-credit basis in any course which is not required for the student's *major, professional education requirements and endorsement requirements*.

The College of Engineering accepts hours earned on a credit/no-credit basis in any course which is not specifically required for the student's *degree*.

The University College accepts hours earned on a credit/no-credit basis in any course not required for a student's *Coordinated Study Program*.

A student who registers for a course on a credit/no-credit basis may change the registration to a letter grade-quality point basis only during the add period, and a student who registers for a course on a letter grade-quality point basis may change the registration to a credit/no-credit basis only during the add period. A student making such a change will be charged as if dropping and adding a course. The student who successfully completes a credit/no-credit course will receive the appropriate number of hours as credit toward graduation. These hours will not be used in the computation of the quality point average.

Student Grade Appeal Procedure

This appeal procedure is designed to provide any undergraduate at Memphis State University with a clearly defined avenue for appealing the assignment of a course grade which the student believes was based on prejudice, discrimination, arbitrary or capricious action, or other reasons not related to academic performance. **In all cases the complaining student shall have the burden of proof with respect to the allegations in the complaint and in the request for a hearing.** If any party fails to pursue any step of this procedure within the time limits, the disposition of the student's complaint made in the last previous step shall be final. The procedure is terminated if the student and instructor agree on the grade or if the student fails to appeal a decision within the appropriate time limit. All correspondence and records will be retained in the office in which the complaint is terminated.

Step 1 The student shall first consult with the instructor in an effort to provide a satisfactory resolution of the complaint. In the event the student cannot schedule a meeting with the instructor, the student may contact the department chair who will schedule the meeting between the student and the instructor. The only exception to this procedure is the case where the instructor has been terminated by the university or is

unavailable so that it is impossible to complete Step 1 within the allotted forty-five days. In this case the student may proceed directly to Step 2.

Step 2 If the complaint is not resolved in Step 1, the student may present the complaint in writing to the chair of the department in which the course was offered within forty-five days from the end of the term during which the grade was received. For the purposes of the grade appeal procedure, all summer sessions collectively will constitute a single term. (Students enrolled in courses during any summer term shall have forty-five days following the end of the *last* summer term in which to file a grade appeal.) The department chair will attempt to resolve the complaint in consultation with the instructor and the student within a fifteen-day period dating from the formal presentation of the written complaint. The department chair may, at his/her discretion, consult with the faculty of the department.

If the department chair was the instructor of the course involved in the complaint or if for any reason the chair disqualifies him/herself, the student may proceed to Step 3.

The student's grade may be changed in Step 2 of the appeal procedure by the written consent of the instructor and the student.

Step 3 If the complaint cannot be resolved at the level of Step 2 within the prescribed fifteen-day time period, the student within five days following the end of such period, may appeal further by presenting to the dean of the college a written statement which clearly explains the basis of the appeal (prejudice, discrimination, arbitrary or capricious action, or other reasons not related to academic performance); the evidence for this appeal and any supporting data. The chair must also forward a copy of all correspondence and records to the dean.

The dean may utilize any resources available to the dean's office to resolve the grade conflict within a fifteen-day period. If the dean finds that the request does not have merit, the dean shall so notify the student, the instructor, and chair. If the dean and chair are in agreement that the grade should be changed, either raised or lowered, the dean shall be empowered to change the grade without the instructor's consent. Otherwise the grade shall remain as recorded.

Either the student or the instructor may appeal the dean's decision made under Step 3 within fifteen days by filing a written request for a hearing before the University Grade Appeals Committee. In the event of such an appeal the decision shall be stayed pending the completion of the procedure in Step 4. The dean must be provided a copy of the hearing request.

Step 4 The written request for a hearing before the University Grade Appeals Committee should state the factual basis for the appeal of the dean's decision. If the committee finds the student's or the instructor's request merits a hearing, the committee shall notify the student, the instructor, the chair and the dean of the time and location of the hearing. If the committee finds that the request does not merit a hearing, the student and the instructor shall be so notified.

The University Grade Appeals Committee shall function as a review board. The committee shall have the power to allow the assigned grade to stand or to raise or lower the assigned grade. Its decision must be formally announced to all parties. The time schedule allotted for completion of action by the committee shall be fifteen days.

The decision of the University Grade Appeals Committee will be final.

The University Grade Appeals Committee shall be composed of seven members and seven alternates constituted as follows:

A chair designated by the Vice President for Academic Affairs, a faculty member and alternate designated by the dean of the college involved, two faculty members and two alternates elected by the Academic Senate, three students and three alternates selected through the Student Government Association.

Although the primary responsibility of the committee is to review appeals, the committee will report any obvious discriminatory or capricious conduct on the part of either the student or the instructor to the appropriate Vice President for consideration and action.

QUALITY POINTS

In computing a student's scholarship ratio, or quality point average, all courses attempted are included except credit-no-

credit, audit, incomplete, remedial and developmental, and satisfactory unsatisfactory courses and "T" grades. As an example: a student carrying five three-semester-hour courses for a total of 15 semester hours makes the following grades: A, B, C, T, F; thus accumulating quality points in the amount of 12, 9, 6, 0, 0, for a total of 27. In computing the quality point average, the number of hours attempted (except "T" grade) (12) is divided into the quality points earned (27) for an average of 2.25.

Graduation: A minimum 2.0 quality point average on all work attempted is required for graduation.

Academic Fresh Start

An ACADEMIC FRESH START, allowing calculation of quality point average and credit hours toward graduation to be based only on work done after returning to college, is provided for undergraduate students who have gained maturity through extended experience outside higher education institutions and have demonstrated better than average academic performance following their return to Memphis State. Requirements to be satisfied by a student requesting an Academic Fresh Start toward a baccalaureate degree are as follow:

1. Separation from all academic institutions for at least seven years.
2. After returning to college, completion of at least 36 semester hours of earned graded course work prior to application for ACADEMIC FRESH START.
3. QPA of at least 2.5 for all work attempted after returning to college and at the time of application.
4. Formal application to the dean of the student's college, requesting that an ACADEMIC FRESH START be granted and describing an academic plan which may include the declaration of a major.

Upon approval of the college dean, the student will be granted an Academic Fresh Start. It may be granted once. The student's permanent record will remain a record of all work; however, the student will forfeit the use for degree purposes at Memphis State any college or university credit earned prior to the seven-year separation indicated above. The date of the fresh start will coincide with the date of re-entry following prolonged separation, and the permanent record will note that a fresh start was made and the date of the fresh start. The record will also carry the notation, "QPA and credit totals are based only on work beginning with that date."

ACADEMIC STATUS AND RETENTION

At Memphis State University, the academic status of a student is denoted by one of three conditions:

- (1) GOOD STANDING
- (2) ACADEMIC PROBATION
- (3) ACADEMIC SUSPENSION

Official notification of academic status is by means of the grade report processed to each student at the end of the regular semester or summer session. The aca-

demic status of probation or suspension will be stated at the end of the report of grades. Policies and procedures related to each of these conditions are outlined in the following comments.

Good Standing

Students are in good standing so long as their quality point average is equal to the minimum cumulative QPA required on the sliding retention scale as defined in this policy statement. The term *good standing* indicates only that the student is meeting the minimum standard for retention in the university. However, in order to meet graduation requirements, the student must have a cumulative QPA of 2.0. Any time that a student's cumulative QPA falls below 2.0, a warning is printed on the grade report, and the student should consult immediately with the academic advisor.

Academic Probation

A student will be placed on academic probation at the completion of any regular semester or summer session when the student's cumulative QPA falls below the following:

HOURS ATTEMPTED	MINIMUM QPA
14.99 or less	No minimum
15.00—29.99	1.40
30.00—50.99	1.70
51.00—67.99	1.90
68 and above	2.00

A student on academic probation who withdraws from the university during the first probationary semester will be "continued on academic probation." Withdrawal by such a student from any subsequent probationary semester will be treated as an academic suspension requiring clearance from the Academic Status and Retention Office for any future registration. Students who are enrolled on academic probation are not allowed to participate in registration for the subsequent semester until their grades are presented for the semester currently enrolled. For the purpose of participation in extra-curricular and organizational activities sponsored by the university, students are considered in good standing and eligible to participate while on probation unless other requirements are specified by a particular group, organization, or activity.

Academic Suspension

A student on academic probation who, at the end of the following term of enrollment, fails to raise his/her QPA to at least the required minimum on the Sliding Scale Retention Policy above will be suspended. There is one exception to this policy: a student on academic probation will not be suspended at the end of any semester or summer session during which a term average of 2.00 has been earned.

(1) A student who incurs a first suspension must remain out of the university a

minimum of one regular semester (fall or spring).

(2) A student who incurs a second suspension must remain out of the university a **minimum** of one calendar year.

(3) A student who incurs a third suspension must remain out of the university a **minimum** of three calendar years.

(4) A student who has been readmitted following a third suspension and who then fails to meet the retention standards is ineligible for further enrollment at Memphis State University.

(5) Former Memphis State University undergraduate students on academic suspension will be readmitted under the retention policy in effect their last semester at Memphis State University. A counseling interview will be required prior to re-enrollment. Academic status will be determined by the Academic Retention Policy in effect in the current *University Bulletin*.

The university office responsible for the administration of this policy is the Academic Status and Retention Office (Room 167, Administration Building).

Recognition for Academic Performance

There are several means available by which students may obtain recognition for outstanding academic performance. In addition to those listed below, there are other honors and awards listed in the descriptions of the various honors programs.

THE DEAN'S LIST

The Dean's List is composed of those students who meet *one* of the following criteria:

1. Completion of 6-8 graded hours in a semester with a semester quality point average of 4.00.
2. Completion of 9-11 graded hours in a semester with a semester quality point average of 3.66 or above.
3. Completion of 12 or more graded hours in a semester with a semester quality point average of 3.50 or above.

A student is ineligible for the Dean's List at the end of any semester during which a course is being repeated for the purpose of improving a grade previously earned. Remedial/developmental courses are not considered in calculating eligibility for the Dean's List.

GRADUATION WITH DISTINCTION

Students who meet the requirements described below are eligible to graduate *cum laude*, *magna cum laude*, or *summa cum laude*:

1. Fulfillment of graduation requirements
2. Completion of a minimum of fifty (50) graded semester hours at Memphis State prior to graduation
3. Final cumulative quality point averages as follow:

<i>Cum Laude</i>	3.2500 — 3.4999
<i>Magna Cum Laude</i>	3.5000 — 3.7999
<i>Summa Cum Laude</i>	3.8000 — 4.0000

*Recognition of graduation with distinction at commencement ceremonies will be based on the completion of a minimum of forty-five (45) graded semester hours at Memphis State prior to the final semester. (During the final semester, the student must also be enrolled for a sufficient number of hours to complete the required minimum of fifty.) This recognition is *not* an actual conferral of distinction.

A transfer student, in order to be eligible, must have made the required average on all work taken at Memphis State University and must, in addition, have an over-all average which meets the honors requirements above. In no instance may the QPA used for determining graduation with distinction be higher than that earned on courses taken at Memphis State University.

A student who already holds a baccalaureate degree is eligible for these distinctions if the requirements above are met and if, within the hours presented to fulfill the requirements for the second degree, at least forty-five additional graded hours have been taken at Memphis State University subsequent to the award of the first degree. (These hours would be for *new* courses, *not* courses repeated for a higher grade.) The QPA used for determination of distinction for the second degree will be calculated from *all* undergraduate courses taken.

Either the complete set of requirements governing graduation with distinction in the current catalog or the complete set in the Catalog governing the degree requirements for the student's graduation may be used to determine honors.

PRIVACY RIGHTS OF PARENTS AND STUDENTS

The Family Educational Rights and Privacy Act of 1974, with which the University intends to comply fully, is designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with The Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the institution to comply with the Act.

The provisions for the release of information about students and the rights of students and others to have access to Memphis State University education records are published in their entirety each semester in the *Schedule of Classes*.

ADDITIONAL MEANS OF EARNING CREDIT

Advanced Standing Credit

Credit toward a degree will be accepted only from collegiate level institutions for courses which are substantially equivalent to those offered at Memphis State University. After the student has been approved

for admission as a regular undergraduate, the Transfer Affairs Section of the Office of Admissions will evaluate credits for university-wide use. The Office of the Dean in each college has the authority for determining the use of acceptable credit toward specific degree programs in that college. (Also see Transfer Credit section below.)

In computing the scholarship ratio or quality point average of a student who has earned an associate degree from an institution with a grading practice which does not reflect failing grades, only those courses for which credit was granted will be used. A student who does not earn the associate degree prior to transfer or one who attends merely to take courses will have the quality point average computed using all courses attempted at that institution.

Transfer credit from colleges not accredited by the Tennessee State Board of Education and/or the Southern Association of Colleges and Secondary Schools (or corresponding agencies for other states and regions of the United States) will not be accepted toward a degree or toward teacher licensure.

Credit for Service in the Armed Forces

Veterans who have completed one year or more of continuous full-time active military service will be excused from taking the required physical activity course(s) but must take HPER 1100, *Concepts of Fitness and Wellness*. In addition, six semester hours of health and physical education credit will be allowed upon presentation of a copy of the veteran's report of separation (DD Form 214) to the Admissions Office. Total physical activity course credit applicable to the baccalaureate degree cannot exceed 8 semester hours, regardless of the source.

The Transfer Affairs Section of the Admissions Office should be consulted to determine whether additional credit may be allowed for training completed through formal service schools (DD form 295). Certain subject standardized tests offered by the Defense Activity for Non-Traditional Education Support (D.A.N.T.E.S.) may be submitted for consideration. Official D.A.N.T.E.S. transcripts are required. The maximum amount of credit accepted for applicable D.A.N.T.E.S. courses and/or correspondence and extension courses is 33 semester hours, and 20 semester hours of lower division credit for selected service schools. (This restriction does not apply to credit accepted by the University College.) An official evaluation of service credit is not made until a student enrolls as a regular undergraduate student. Credit awarded for completion of selected service schools will be governed by the recommendations at the baccalaureate level as outlined in the current *Guide to the Evaluation of Educational Experience in the Armed Services*.

Noncollegiate Sponsored Instruction

Credit may be obtained for applicable courses completed through certain non-collegiate sponsored instruction as recommended in the current *A Guide to Educational Programs in Noncollegiate Organizations*. No more than 20 semester hours credit for service schools and/or noncollegiate sponsored programs will be allowed. The Transfer Affairs section of the Admissions Office should be contacted for further information.

Advanced Placement Credit

Memphis State University participates in the Advanced Placement Program of the College Entrance Examination Board. A maximum of 24 semester hours may be given to qualified students on the basis of the examinations conducted by the Board. To be eligible for credit, an entering freshman must place in group three, four, or five of the CEEB Advanced Placement Tests. Information pertaining to approved scores and credit to be awarded may be obtained from the Transfer Affairs section of the Admissions Office.

Transfer Credit

After enrollment as regular undergraduates at Memphis State University, students should obtain prior approval from the dean of the college from which they are to graduate before taking a course at another institution for the purpose of meeting degree requirements at Memphis State University. The student who intends to take a course at another institution should consult with the Transfer Affairs section of the Admissions Office and obtain forms for use in securing the dean's approval. Courses taken without prior approval are subject to possible disapproval when they are presented for evaluation at Memphis State.

Before credit earned at another institution can be transferred and recorded on a permanent academic record, the student must have an official transcript mailed to the Admissions Office and must contact the college dean's office to make arrangements to have credit posted to the academic record.

The maximum credit hour load allowed for any term includes all course enrollments both at Memphis State University and any concurrent enrollment at other institutions. (See "Credit Hours and Maximum Load.")

Correspondence or Extension Credit

Memphis State University accepts a limited number of credits earned by correspondence and/or extension, provided that such credits are taken from an institution which is a member of the

University Extension Association, or the appropriate regional accrediting association. Memphis State University offers some work by extension but none by correspondence.

Prior to a student's initial registration at Memphis State University as a regular undergraduate, the Office of the Dean of Admissions, Records, and Registration will, at the time the student applies for admission, determine the acceptability of extension and/or correspondence credits earned at other institutions. After the student has been admitted as a regular undergraduate, whether a beginning freshman or a transfer student, credit applicable to any Memphis State University degree will not be given for subsequent correspondence or extension courses unless written permission from the dean of the degree granting college is obtained prior to enrollment in such courses.

No student is permitted to enroll for correspondence or extension courses while carrying a maximum load at Memphis State University. Not more than one-fourth of the semester hours applied on the bachelor's degrees may be earned by correspondence or extension or a combination of the two. (This restriction does not apply to degree programs of the University College.)

A student who has completed thirty-three of the last sixty-six hours required of residence and who lacks *no more* than four semester hours toward completion of degree requirements may earn these additional credits by acceptable correspondence or extension work, or by residence at another approved institution. (For details of residence requirements, see *Graduation from the University*.)

University Credit by Examination

Students may not take an examination for credit in any course previously taken for credit. Students may, however, take an examination for credit in courses which were audited or in courses which are at a lower level than a course which was taken for credit.

CLEP EXAMINATIONS

CLEP is a national program of credit-by-examination, sponsored by the College Entrance Examination Board. It offers students the opportunity to obtain recognition for college-level achievement. Some departments accept CLEP subject area examination credits as equivalent to departmental courses. No credit will be awarded for CLEP general examinations. Information on courses for which CLEP credit is available, along with information of fees charged, is available from the Academic Counseling Unit, the college level advisors, or the specific departments offering CLEP credits.

DEPARTMENTAL EXAMINATIONS

Almost all courses in the undergraduate curricula, except for those of laboratory, research, and performance variety, are available for credit by examination. Students who believe they have already mastered the material of a particular course offered at Memphis State may take a departmentally administered examination for credit in that course. Students should consult the department chair to make application and to obtain information concerning the courses offered.

The following regulations govern the granting of credit by examination:

1. Any student who has been admitted to Memphis State University—full-time or part-time—may make application to take an examination for credit. A student who has been admitted but has not yet registered for courses at Memphis State University will have any credit earned by examination posted to the permanent record after enrollment. Any student (other than first-time freshmen) must have a 2.0 QPA to apply for credit by examination.
2. Permission to take a credit examination must be obtained from the chair of the department in which credit is sought and from the dean of the college in which the student is seeking a degree. When permission is granted and after payment of the cost of the examination, the Dean of Admissions, Records, and Registration will issue an official permit for the examination. (See *Fees and Charges*).
3. The form of the examination, the method of administering it, and the time of examination are left to the discretion of departments.
4. To receive credit, the student's examination grade should be a grade equivalent of at least a C. There are no restrictions governing the number of credit hours which may be earned through credit by examination. Credit is indicated on the student's record as CR.

CREDIT BY PLACEMENT EXAMINATION

In departments in which placement examinations are given, a student may elect to receive credit for certain sequential courses numbered lower than the course in which the student was placed.

1. A student may take the proficiency test, which is given at the beginning of each semester, in order to best determine the initial course in which to be placed. A student taking the proficiency test may apply immediately for the hours of credit warranted by the test score. The student must make written application to the chair of the department and make payment of appropriate fees for such credit to be recorded.
2. Students may enroll in a course at the level for which they feel previous training qualifies them. In the Department of Foreign Languages and Literatures, recording of credit for the lower numbered course may be requested by the student upon completion of the course in which enrolled and is contingent upon the student's earning a grade of C or higher in the course. *Written application to the chair of the department and payment of appropriate fees is required for such credits to be recorded.*

There is no fee charged for taking placement examinations; however, there is a fee for all placement credits which are recorded. For information on the fees, see *Expenses and Aid*.

University Credit for Experiential Learning

Students seeking degrees in the College of Communication and Fine Arts, the College of Education, and the University College may be granted credit for college-

level knowledge and understanding gained from work experience, life experience, or for certain non-traditional instruction. The student who wishes an assessment of such learning prepares a detailed and documented portfolio of those learning experiences which are to be evaluated.

Assessment by portfolio is reserved for knowledge and competencies which do not readily fit into the credit by examination procedures described above. More detailed information about procedures may be obtained from the individual colleges. For fee information, see *Expenses and Aid*.

6. GRADUATION FROM THE UNIVERSITY

GENERAL REQUIREMENTS

Courses required for all baccalaureate degrees are outlined in the section which follows; specific requirements for the individual degrees will be found in the *Colleges and Degree Programs* section. Requirements for the Juris Doctor degree will be found in the *Catalog of The School of Law*; requirements for graduate degrees will be found in the *Catalog of The Graduate School*.

The following have been established as minimum requirements by the university for all undergraduate degrees offered. In addition, the student must meet the requirements for the specific degree as established by the college or department in which it is offered. A minimum of 132 semester hours is required for all degrees. In some degrees and majors, the courses which may be used to meet the university requirements below are specified. The assistance of an advisor for the particular degree and major must be sought to determine which courses will meet degree requirements.

1. GENERAL EDUCATION

The general education program is that part of the undergraduate curriculum which promotes a common background for all baccalaureate candidates. The purpose of the general education program is threefold: to help students develop the skills necessary for completing a college career and for assuming an active role in contemporary society; to assist students in gaining an awareness of the diversity of human endeavors in intellectual, creative, social and technological spheres; and to help students develop analytical and critical faculties that can be applied across the range of issues confronting them in the modern world. Above all, the general education program extends beyond particular disciplines and majors to make available to the student the tools and awareness necessary for active, lifelong learning and for active, literate participation in society.

A. English Composition: 6 hours

ENGL 1101	English Composition
ENGL 1102	English Composition and Analysis

All candidates for graduation at Memphis State University are required to complete English 1101 and 1102, or their equivalents, with a grade of C or better. Before enrolling in English 1101, a student must have either: (1) an ACT English score of 19 or above, or (2) an SAT verbal score of 450 or above, or (3) a satisfactory completion of a placement essay administered by the Memphis State University Testing Center. Those who do not must successfully complete R&DS 0810 with a grade of C or better before proceeding to English 1101. English 1101 and 1102 must be taken in sequence; no credit will be allowed for English 1102 until 1101 has been successfully completed.

B. Oral Communication and Rhetoric: 3 hours

COMM 2381 Oral Communication

C. Mathematics: 3-6 hours

MATH 1181-1182	(6) Concepts of Number/ Concepts of Algebra
MATH 1312	(3) Elementary Calculus
MATH 1321	(4) Analytic Geometry and Calculus
MATH 2000	(3) Experiences in Mathematics

D. Literary Heritage: 3 hours

ENGL 2201 Literary Heritage

E. Fine Arts Heritage: 3 hours

ART 1101	Introduction to Art
COMM 1851	Introduction to Film
DANC 1151	Introduction to Dance
MUHL 1101	Music Appreciation
THEA 1551	Introduction to Theatre

F. Historical/Philosophical Heritage: 6 hours

Select one from each group.

1. Pre-1500: 3 hours

CLAS 2481	Mythology
HIST 1301	Development of World Civilization I
PHIL 1101	Classical Issues in Philosophy
POLS 1101	Introduction to Ancient Political Thought
UNIV 2850	Religions of Abraham: Judaism, Christianity, Islam
UNIV 3580	Hebrew and Greek Legacy

2. Post-1500: 3 hours

HIST 1302	Development of World Civilization II
PHIL 1102	Values and the Modern World
POLS 1102	Introduction to Modern Political Thought
UNIV 3581	Faith, Reason and Imagination

G. American Heritage: 6 hours

HIST 2601	The United States to 1877
HIST 2602	The United States Since 1877

Thematic Courses: One of the following may be taken in lieu of either HIST 2601 or 2602:

ANTH 3282	Cultural History of American Communities
GEOG 3401	Historical Geography of the United States
HIST 3863	Social and Intellectual History of the United States
HIST 4851	History of Women in America
HIST 4881	Black American History
POLS 4212	Constitutional Law: The Origins and Evolution of Civil Liberties in the United States
POLS 4405	Origin and Development of American Political Thought
SOCI 3422	Racial and Ethnic Minorities: A Socio-Historical Approach

*This requirement is waived for engineering students and students enrolled in University College except for those who did not earn one unit in American History in high school. The state requires that students who did not earn one unit in American History in high school take it during their first or second year at the university. Those students who use the G.E.D. rather than high school graduation for admission to the university will be considered as having the equivalent of a Tennessee high school diploma and thus, to have had the equivalent of American History in high school. This does not mean that a student admitted to Memphis State may take the G.E.D. as an exam for credit in American History.

H. Social Science: 6 hours (One course from list 1 and one from list 1 or list 2)

1. Global Perspective: (One must be selected from this group)

ANTH 1200	Cultural Anthropology
CJUS 2110	Comparative Justice Systems
ECON 2110	Introduction to Macroeconomics
GEOG 1301	Survey of World Regions
GEOG 1401	Introduction to Cultural Geography
POLS 2301	Comparative Politics
POLS 2501	International Politics
PYSC 2201	Deviance: Its Role in History and Culture
SOCI 2100	Sociology of International Development
SOCI/HMEC 2101	The Family in Global Perspective
UNIV 2304	Gender and Society

2. (One may be selected from this group or list 1)

ANTH 1100	Human Origins and Variation
CJUS 1100	Introduction to Criminal Justice
ECON 2120	Introduction to Microeconomics
POLS 1100	American Government
PSYC 1101	General Psychology
SOCI 1111	An Introduction to Sociology

I. Natural Science: 8 hours (Sequence required)

BIOL 1101-1101	Biology: A Human Perspective
BIOL 1111-1112	General Biology I & II
CHEM 1101-1102	College Chemistry I & II
CHEM 1121/1131 -	
1122/1132	Principles of Chemistry
GEOG 1101-1102	Introduction to Earth Science
GEOL 1101-1102	Physical and Historical Geology
GEOL 1101-GEOL 1101	
PHYS 1101-1102	Introductory Physics and Astronomy
PHYS 2511-2512	Physics for Science and Engineering
UNIV 1610-1611	Natural Science

J. Fitness and Wellness: (4 hours)

HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course: DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Any student except those with a major or minor in Physical Education or those seeking a B.B.A. degree has the option of taking the activity courses for a letter grade or on a credit/no credit basis. A student unable, for medical or other reasons, to take regular physical activity courses is required to register for an adaptive class, or otherwise follow recommendations of the Chair of the Department of Health, Physical Education and Recreation.

Only students in the following programs may apply more than 8 semester hours of physical activity credit to the minimum degree requirement of 132 semester hours (see specific college limitations): Physical Education major or minor, Recreation major, B.F.A. Theatre major with a concentration in Performance or Dance, B.A. Theatre major, Theatre or Dance minor.

K. Computation Intensive [C]: (3 hours)

At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

L. Writing Intensive [W]: (3 hours)

At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

M. Integrative [I]: (3 hours)

At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

2. COMPUTER LITERACY

Students who entered Memphis State University or any other institution as beginning freshmen in fall, 1984, or later, are required to possess competency in computer literacy prior to graduation. Competency may be gained either by

passing grades in designated coursework or passing a specially designed test. Courses which fulfill this requirement are specified by the college in which the student is enrolled for a degree.

3. QUALITY POINT AVERAGE

To receive a bachelor's degree from any of the colleges in the university, a student must have a quality point average of at least 2.00 (i.e., two quality points for every semester hour attempted). If for any reason a student offers more than 132 semester hours credit for graduation, the ratio of two quality points to one semester hour of credit must be maintained. To attain this standard the candidate must have a C average on all courses attempted in the university. Students with transfer credit are required to maintain an average of C on all courses taken at Memphis State University.

4. RESIDENCE REQUIREMENTS

A student will satisfy residence requirements for graduation by completing, at Memphis State University, 33 of the final 66 semester hours which are required for a degree. (A student transferring credits from a two-year collegiate institution must complete, as a requirement for the baccalaureate degree, a minimum of sixty semester hours in an accredited senior institution.) In addition, the student must meet the residence requirements for the specific degree as established by the college in which it is offered. Exceptions to residence requirements can be authorized by the appropriate dean.

Residence requirements for specific degrees within each college may be found in the *Colleges, Degree Programs and Courses* section. For more details, the student should inquire in the office of the dean of the appropriate college.

5. TESTING AS A PREREQUISITE FOR GRADUATION

Any or all students may be required to take one or more tests designed to measure general education achievement and/or achievement in selected major areas as a prerequisite to graduation, for the purpose of evaluation of academic programs. Unless otherwise provided for in any individual program, no minimum score or level of achievement is required for graduation. Participation in testing may be required for all students, for students in selected programs, and for students selected on a sample basis. Details concerning these regulations and the dates

of the examinations will appear in the *Schedule of Classes* each semester.

6. FILING FOR GRADUATION

All students are required to file an intention to graduate during the semester prior to the semester of graduation. The deadlines for this filing are included in the academic calendars of the catalogs and the schedules of classes. It is the responsibility of the student to insure that this deadline is met.

REQUIREMENTS FOR TEACHER LICENSURE

An undergraduate student can be recommended for licensure to teach in Elementary Education (Grades 1-8); Early Childhood Education (Grades K-3); or Special Education (Grades K-12) in the State of Tennessee by completing all degree requirements for that endorsement as outlined for the Bachelor of Science in Education in the COLLEGE OF EDUCATION DEGREE PROGRAMS section of this catalog.

A student in any of these programs must (1) file an application for admission to the Teacher Education Program in The College of Education; (2) fulfill the requirements and application procedures for the Internship/Student Teaching Program; (3) file an intent to graduate application prior to the University deadline; (4) have an overall QPA of no less than 2.50; a QPA of 2.50 in required professional education courses; a QPA of no less than 2.50 in all courses fulfilling completion of each endorsement area; a grade of C or above in each required professional education course; (5) take the Core Battery and the Specialty area (if required) of the National Teacher Examinations (NTE); and (6) fulfill all other graduation requirements listed under the TEACHER EDUCATION PROGRAMS: REQUIREMENTS section.

Students entering the university for the first time as freshmen who wish to prepare for teaching careers in fields other than Elementary Education, Early Childhood Education or Special Education will be required to complete a baccalaureate degree in the teaching area in the college that offers a major in the specific subject for which licensure is desired. Students should consult with their major advisor to insure that all general education, teaching field, and pre-professional standard

requirements for teacher licensure are fulfilled. Recommendation for licensure will be contingent upon completion of the fifth year, Master of Arts in Teaching degree program in the College of Education.

Graduate, special, and transfer students who wish to obtain a teacher's license should confer with The College of Education General Advisor concerning their individual requirements.

Placement services are available to those students who register in the Teacher Placement Office.

CATALOG APPLICABILITY

A student may complete the requirements for the initial degree under the provisions of any *valid* MSU catalog provided the effective date of that catalog is not earlier than the student's initial admission to MSU or some other accredited institution of higher learning. The degree requirements published in the *Undergraduate Catalog* issue of the Memphis State University *Bulletin* are valid for seven years from the beginning of the academic year to which the catalog applies. (This issue of the catalog is valid *through* summer 1997).

SECOND BACHELOR'S DEGREE

A student who completes the requirements for one bachelor's degree from Memphis State University may receive a second bachelor's degree upon the completion of the curriculum prescribed in the current catalog or any other valid catalog approved by the appropriate degree-granting college. The two degrees may be conferred simultaneously or subsequently. The student is limited to one degree with the same title. Students who are seeking a second bachelor's degree and who have earned the initial bachelor's degree from another institution are subject to all catalog regulations applicable to transfer students.

If a student completes the requirements from a valid catalog for an additional major for a degree previously earned at Memphis State University, that major may be posted on the student's record *if the student applies for the additional major through the appropriate dean's office*.

7. COLLEGES, DEGREE PROGRAMS AND COURSES

The section which follows contains the specific requirements for completing each degree, major, minor, or certificate offered by the university. It is organized by college and department. The courses offered by each college follow the degree program requirements of that college. There is a statement concerning how to use the catalog for degree program planning located with the Academic Calendar at the beginning of the *Catalog*. *Students are urged to consult with an advisor for assistance in planning their degree programs and selecting appropriate courses.*

Explanation of course description format: The official course title appears in boldface type following the course number. The figures in parentheses after the course title denote the number of semester hours of credit for that course. If the credit is variable, to be determined by the department, that fact is indicated by the minimum and maximum credit, as BIOL 4000 (2-4). If the phrase "Same as . . ." and another course number appear in parentheses following the credit hours, the course is cross listed with a course in another department and when offered by both departments, may be taken through either.

If another course number in parenthesis follows the credit hours, it is the former number for the same course. Credit may not be received for both the former number and the current number of the same course. For those courses including regular laboratory hours, the lecture/laboratory hour distribution is written in italics near the end of the course description. At the end of many course descriptions, prerequisites and/or corequisites are listed. Students are responsible for meeting the stated prerequisites prior to enrolling for the course. A [G] at the end of the course description indicates that the course may be used to fulfill university general education requirements. *These requirements vary somewhat according to the particular degree program or major.* Similarly, a [W] indicates a course approved as writing intensive for some programs, a [C] indicates a computational intensive course, and an [I] indicates an integrative course.

Courses are numbered according to the following system:

0001-0999 *Courses for which the credit does not apply toward minimum degree requirements or for which credit is restricted*

1000-1999	<i>Courses primarily for freshmen</i>
2000-2999	<i>Courses primarily for sophomores</i>
3000-3999	<i>Courses primarily for juniors</i>
4000-4999	<i>Courses primarily for seniors and for which graduate credit is not offered. (There is sometimes a corresponding 6000 number for which graduate credit is offered to graduate students who fulfill the additional requirements for such credit.)</i>

1000-2000 level courses are lower division courses, 3000-4000 level courses are upper division courses. Course numbers have no reference to the semester in which the courses are taught.

The Schedule of Classes is published a few weeks prior to priority registration for each semester and The Summer Session. It contains a listing of the specific courses to be offered, with the time, place, and instructor in charge of each section. It also contains special announcements concerning registration procedures and courses which may have been added since the publication of the *Catalog*. Copies are available outside the Registration Services Office, room 161 in the Administration Building.

ELEMENTS OF COURSE DESCRIPTION

¹4002-²6002. ³Museum Operation. ⁴(3). ⁵(3050). ⁶(Same as ANTH 4002). ⁷Basic aspects of museum organization, management, exhibit planning and execution, and maintenance of collections and records. ⁸Two lecture/two laboratory hours per week. ⁹PREREQUISITE: ART 3090. ¹⁰COREQUISITE: ART 4001. ¹¹(S/U). ¹²[G].

- ¹ Course number/level
- ² 6000 level cognate
- ³ Course title
- ⁴ Credit hours
- ⁵ Former course number
- ⁶ Cross listing
- ⁷ Course description
- ⁸ Lecture/laboratory description
- ⁹ Prerequisite
- ¹⁰Corequisite
- ¹¹Special Grading
- ¹²General Education *

The College of Arts and Sciences

WILLIAM E. CARPENTER, Ph.D., *Dean*
Room 219, Mitchell Hall

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
Anthropology	Anthropology		Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
Biology	Biology	(1) Botany (2) Microbiology (3) Invertebrate Zoology/Entomology (4) Toxicology (5) Vertebrate Zoology	Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
Chemistry	Chemistry		Bachelor of Arts (B.A.) Bachelor of Science (B.S.) Bachelor of Science in Chemistry (B.S.Ch.)
Criminology and Criminal Justice	Criminal Justice		Bachelor of Arts (B.A.)
Economics	Economics		Bachelor of Arts (B.A.)
English	English	(1) British Literature (2) American Literature (3) Modern Literature (4) Creative Writing (5) Professional Writing (6) Language and Linguistics (7) English as a Second Language	Bachelor of Arts (B.A.)
†Foreign Languages and Literatures	Foreign Languages (With single language concentration from the first five or multiple language concentration from total list)	(1) French (2) German (3) *Russian (4) Spanish (5) Latin (6) Greek (7) Italian	Bachelor of Arts (B.A.)
Geography and Planning	Geography	(1) Applied Geography for Business and Planning (2) Cartography (3) Environmental and Earth Science (4) Geography (5) Urban Geography	Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
Geological Sciences	Geological Sciences	(1) Geology (2) Geophysics	Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
History	History		Bachelor of Arts (B.A.)
Mathematical Sciences	Mathematical Sciences	(1) Mathematics (2) Applied Mathematics (3) Statistics	Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
	Computer Science		Bachelor of Science (B.S.)
Philosophy	Philosophy		Bachelor of Arts (B.A.)
Physics	Physics		Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
Political Science	Political Science	(1) Political Science (2) Public Administration	Bachelor of Arts (B.A.)
Psychology	Psychology		Bachelor of Arts (B.A.) Bachelor of Science (B.S.)
Sociology and Social Work	Sociology	(1) General Sociology (2) Conflict and Change in Modern Society (3) Life Cycle Studies (4) Sociology of the South	Bachelor of Arts (B.A.)
	Social Work		Bachelor of Arts (B.A.)
Interdepartmental Programs	Medical Technology		Bachelor of Science in Medical Technology (B.S.M.T.)
	International Relations	(1) American Foreign Policy (2) Asia (3) Latin America (4) Middle East and North Africa (5) Soviet Union (6) Sub-Saharan Africa (7) Western Europe	Bachelor of Arts (B.A.)

* A concentration in Russian requires a collateral foreign language concentration or a collateral major outside the Department of Foreign Languages and Literatures.

† With the consent of the International Business Advisor, Foreign Languages may also be a second or collateral major for the B.B.A. degree with a major in International Business.

PURPOSES

The College of Arts and Sciences has three distinct functions within the framework of the university.

1) Its primary function is to offer a strong liberal arts program designed to help the students prepare themselves for life in their own cultural setting by acquiring the means and desire to continue the processes of intellectual development and character formation throughout their lives. "The purpose of education," wrote John Stuart Mill, "is to make capable and cultivated human beings." "Education has for its object the formation of character," wrote Herbert Spencer. We believe that people are people, no matter what their careers, and that if we can help people to become more capable and sensible, they will have better careers and lives. It is our belief that the best preparation for any profession or vocation is a thorough foundation in those major fields of human interest, which are included in the humanities, the natural sciences, and the social sciences. A program of liberal studies at Memphis State University aims to provide the students with a store of factual knowledge, to introduce them to varying sets of principles, to stimulate them to think about and to evaluate facts and principles, and to encourage them to order their own affairs and those of their society with the talent, insight, and discrimination which they develop.

2) The College of Arts and Sciences offers this kind of education to the candidates for its own degrees, and to the students of other colleges of the university, all of whose degree plans call for courses in the arts and sciences.

3) The college offers preparatory courses for students interested in careers in medicine, dentistry, nursing, teaching, law and other professions; specific pre-professional programs, designed to prepare students to qualify for admission to professional schools, are available.

ORGANIZATION OF THE COLLEGE

Departments

The College of Arts and Sciences comprises fifteen departments: Anthropology, Biology, Chemistry, Criminal Justice, English, Foreign Languages and Literatures, Geological Sciences, Geography and Planning, History, Mathematical Sciences, Philosophy, Physics, Political Science, Psychology, and Sociology and Social Work. Requirements for the majors and minors offered by these departments are listed in this section under *Departmental Requirements for Majors and Minors*.

CONCENTRATION GROUPS

The various offerings of the fifteen departments of The College of Arts and

Sciences are organized into three concentration groups:

HUMANITIES: English, French, German, Greek, history, Italian, Latin, mathematics, philosophy, psychology, Russian, Spanish.

NATURAL SCIENCES: biology, chemistry, geology, physical geography, mathematics, physics.

SOCIAL SCIENCES: anthropology, criminal justice, economics, geography (other than physical), history, philosophy, political science, psychology, sociology.

RESIDENCE REQUIREMENTS

University residence requirements are explained in detail in the *Graduation from the University* section. A transfer student in The College of Arts and Sciences must earn at least 6 semester hours in residence in the major subject and at least 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

PRE-PROFESSIONAL TRAINING

Standing committees of the faculty are available to advise students interested in preparing for careers in various professional areas. Committee members representing departments of the university in which pre-professional training is given advise students concerning specific programs required by the various professional schools.

Pre-Medical— The Health Science Professions Advisory Office, located in the Dean's Office, offers advising and career information to students planning on applying to the following health-professional schools: medicine, dentistry, pharmacy, optometry, veterinary medicine, nursing and allied health fields including cytotechnology, dental hygiene, medical record administration, medical technology, occupational therapy and physical therapy.

Pre-Law— In general, accredited law schools have not adopted specific requirements for pre-law education; they do, however, emphasize certain courses as being conducive to the development of the broad cultural background necessary for the successful study of law. Students enrolling in The College of Arts and Sciences and interested in applying to law school should see the Pre-Law Advisor for further information.

TEACHER PREPARATION

Students who wish to prepare for teaching careers in the secondary schools of Tennessee will be expected to complete a baccalaureate degree with a major in the

intended teaching area, followed by a fifth-year Master of Arts in Teaching degree program through the College of Education. Additional information on certification requirements may be obtained from the Assistant Dean for Undergraduate Activities.

DEGREE REQUIREMENTS

Degrees Offered

The College of Arts and Sciences offers four degrees: the Bachelor of Arts, the Bachelor of Science, the Bachelor of Science in Chemistry, and the Bachelor of Science in Medical Technology.

Foreign Language Requirements

The foreign language requirement for all degrees offered through the College of Arts and Sciences is as follows:

Two courses in a single foreign language at or above the 2000 level. Beginning in the Fall of 1990, all students who have not successfully completed first year language courses at an accredited institution of higher education and who wish to enroll in 2201 (French, German, Italian, Latin, Spanish) will be required to take the placement test given by the Department of Foreign Languages and Literatures. Those students who do not achieve the score required to be placed in 2201 must take 1199 which is a preparatory course for 2201 and carries a credit of three semester hours. Students whose score is too low for placement in 1199 will be placed in 1101. The 1101-1102 sequence will be reserved for those students who have had no previous training in the chosen language.

For information about the dates and place of placement tests, contact the Department of Foreign Languages and Literatures (678-2506).

A student already having proficiency in a foreign language taught at Memphis State University should enroll in a course at the level for which the student is qualified. This course can best be determined by taking the placement test which is given at the beginning of each semester. (Detailed information is available from the chair of the Department of Foreign Languages and Literatures.) A student taking the placement test may apply immediately for the hours of credit warranted by the test score. Information pertaining to the charges for placement credit is given in the *Fees and Charges* section of this catalog. If the student chooses not to take the placement test, enrollment in any course above the beginning one and completion of that course with a grade of C or better will qualify the student to apply for credit for the preceding courses. In either case, the student must make written application to the chair of the Department of Foreign Languages and Literatures (application forms are available from the department). This regulation shall apply only to the lower division, and credit gained in this manner shall not exceed 12 semester hours in any one language.

This regulation will also apply to a student whose mother tongue is not English, with the following modifications: lower-division credit in the native language will be given when the student has successfully completed the English composition requirement for graduation (see *Graduation from the University*, for details) and has proven proficiency in the native language to the satisfaction of the Department of Foreign Languages and Literatures. The student must make *written application to the chair of the Department of Foreign Languages and Literatures*.

Bachelor of Arts

To qualify for the Bachelor of Arts degree the student must complete a minimum of 132 semester hours with a quality point average of 2.0. Of the 132 semester hours required, no more than 42 semester hours in any one subject will be counted toward a degree. At least 42 semester hours must be in courses from the upper division. Detailed requirements are as follows:

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (6-10 hours): MATH 1181 and 1182, or MATH 2000, or 1312, or 1321; plus one additional course chosen from any MATH course numbered 1211 or higher, or PHIL 1611.

Literary Heritage (6 hours): ENGL 2201 plus one course chosen from: CLAS 3412, 3413, 3414; ENGL 3211, 3212, 3213, 3214, 3221, 3222, 3224, 3321, 3322, 4231, 4232, 4233, 4234, 4241, 4242, 4251, 4252, 4321, 4322, 4223, 4341, 4342, 4371, 4411, 4412, 4423, 4424, 4441, 4451, 4461; FREN 3411, 4412; GERM 3411, 3412, 4443, 4451, 4465; GREK 3111, 3511, 3911, 4441; LALI 4010, 4491, 4492, 4493; LATN 3111, 3211, 3912, 4411, 4711; RUSS 3412, 3441, 3442, 3443, 3444; SPAN 4410, 4431, 4432, 4510, 4561, 4562; THEA 4582.

Fine Arts Heritage (6 hours)—must select two different disciplines): One course from: ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551; plus one course from the previous list or from: ART 2101, THEA 4551, 4552; DANC 3101, MUHL 4800.

Historical/Philosophical Heritage (6 hours): One course from pre-1500: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from post-1500: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881; POLS 4212, POLS 4405; SOCI 3422.

Social Science (12 hours): One course from list A, one course from list A or list B, and two courses from lists A, B, or C (no more than 6 hours from any one discipline):

A: ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

C: COMM 1780; CJUS 3510; GEOG 3430, 4304, 4305, 4313, 4324, 4431; HIST 4871; JOUR 1700; POLS 3213, 3216, 3506; SOCI 1112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923.

Natural Science (11-12 hours): One sequence from list A plus one course in a different science chosen from list A or list B: *Not more than two courses may be taken in the geography/geology area to meet this requirement*.

A: BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; UNIV 1610, 1611; plus one course from biology; chemistry; GEOG 3221, 4111, 4121, 4131, 4201, 4211; geological sciences; physics. *NOTE: Not more than two courses may be taken in the geography/geology area to meet this requirement*.

B: GEOG 3221, 4111, 4121, 4131, 4201, 4211; PHYS 2111.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

Major: Completion of requirements for one of the majors listed below.

Electives to bring the total to 132 semester hours.

Bachelor of Science

The Bachelor of Science degree may be awarded only to students majoring in one of the following disciplines: anthropology, biology, chemistry, computer science, geography, geological sciences, mathematical sciences, physics, or psychology. Students majoring in anthropology, geography, or psychology (for the Bachelor of Science degree) must minor in either biology, chemistry, computer science, geological sciences, mathematical sciences, or physics.

To qualify for the degree of Bachelor of Science, the student must complete a minimum of 132 semester hours with a quality point average of 2.0. Of the 132 semester hours required, no more than 42 semester hours in any one subject will be counted toward a degree. At least 42 semester hours must be in courses from the upper division. Detailed requirements are as follows:

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (6-8 hours): MATH 1312 or 1321, plus one additional course chosen from any MATH course numbered 1211 or higher, or PHIL 1611.

Literary Heritage (6 hours): ENGL 2201 plus one course chosen from: CLAS 3412, 3413, 3414; ENGL 3211, 3212, 3213, 3214, 3221, 3222, 3224, 3321, 3322, 4231, 4232, 4233, 4234, 4241, 4242, 4251, 4252, 4321, 4322, 4323, 4341, 4342, 4371, 4411, 4412, 4423, 4424, 4441, 4451, 4461; FREN 3411, 4412; GERM 3411, 3412, 4443, 4451, 4465; GREK 3111, 3511, 3911, 4441; LALI 4010, 4491, 4492, 4493; LATN 3111, 3211, 3912, 4411, 4711; RUSS 3412, 3441, 3442, 3443, 3444; SPAN 4410, 4431, 4432, 4510, 4561, 4562; THEA 4582.

Fine Arts Heritage (6 hours): One course from: ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551; plus one course in a different discipline from the previous list or from: ART 2101, THEA 4551/THEA 4552, DANC 3101, MUHL 4800.

Historical/Philosophical Heritage (6 hours): One course from pre-1500: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one

course from post-1500: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (9 hours): One course from list A, one course from list A or list B, and one course from lists A, B, or C (no more than 6 hours from any one discipline):

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

C: COMM 1780; CJUS 3510; GEOG 3430, 4304, 4305, 4313, 4324, 4431; HIST 4871; JOUR 1700; POLS 3213, 3216, 3506; SOCI 1112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923.

Human Studies (3 hours): One upper division course from outside the major, chosen from the following disciplines: anthropology, art, communications, criminal justice, economics, geography (excluding those classified as natural science below), history, journalism, literature, music, philosophy, political science, psychology, sociology, theatre.

Natural Science (11-12 hours): One of the following sequences outside the major: BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 2511, 2512; UNIV 1610, 1611; plus one course from biology; chemistry; GEOG 3221, 4111, 4121, 4131, 4201, 4211; geological sciences; physics. *NOTE: Not more than two courses may be taken in the geography/geology area to meet this requirement*.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University-approved computer literacy examination.

Major: Completion of requirements for a major in one of the following disciplines: anthropology, biology, chemistry, computer science, geography, geological sciences, mathematical sciences, physics, or psychology.

Minor: Students majoring in anthropology, geography, or psychology (for a Bachelor of Science degree) must complete a minor in one of the following: biology, chemistry, computer science, geological sciences, mathematical sciences, or physics.

Electives to bring the total to 132 semester hours.

Bachelor of Science in Chemistry

To qualify for the Bachelor of Science in Chemistry degree, the student must complete a minimum of 132 semester hours with a quality point average of 2.0. Of the 132 semester hours required for graduation, at least 42 semester hours must be in courses from the upper division. Detailed requirements are as follows:

English Composition (6 hours): ENGL 1101, 1102 with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (12 hours): MATH 1321, 2321, 2322.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401; HIST 2601, 2602, 3863, 4851, 4881; POLS 4212, 4405; SOCI 3422.

Social Science (6 hours): Select one course from list A and one from list A or B:

A: (Global Perspective): ANTH 1200; CJUS 2110; ECON 2110; GEOG 1301, 1401; POLS 2301, 2501; PSYC 2201; SOCI 2100, SOCI 2101/HMEC 2101; UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (Included in the Chemistry and Physics requirements)

Chemistry (43 hours): CHEM 1131, 1121, 1132, 1122, 3201, 3211, 3301, 3302, 3311, 3312, 3402, 3411, 3412, 3604, 4101, 4111, 4911; three semester hours in 4991, 4992, or 4993; and four additional hours in senior chemistry courses. No more than three hours of research (CHEM 4991, 4992, 4993) may be counted toward the chemistry requirements.

Physics (8 hours): PHYS 2511, 2512, or 2111, 2112 (by permission)

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000. NOTE: *The College of Arts and Sciences accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.*

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement CHEM 3201-3211 may be counted.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement CHEM 4993 may be counted.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the university approved computer literacy examination.

stry of Medical Technologists of the American Society of Clinical Pathologists.

The university maintains an affiliation in Memphis with the School of Medical Technology at St. Francis Hospital, which is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Only those students who enroll in the School of Medical Technology at the hospital can qualify for the degree of Bachelor of Science in Medical Technology from Memphis State University. Students who decide to enter this school after completing successfully the preparatory curriculum with a minimum GPA of 2.50, should apply directly to the school nine to twelve months in advance of the time they wish to enter. After the completion of their clinical year, they may apply for the degree of Bachelor of Science in Medical Technology from this University.

Specific requirements for the preparatory curriculum in medical technology and the additional requirements for those working toward a baccalaureate degree are as follows:

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (6-7 hours): MATH 1212, and one of MATH 1312, 1321.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481; HIST 1301; PHIL 1101; POLS 1101; UNIV 2850, 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401; HIST 2601, 2602, 3863, 4851, 4881; POLS 4212, 4405; SOCI 3422.

Social Science (6 hours): Select one course from list A and one from list A or B:

A: (Global Perspective): ANTH 1200; CJUS 2110; ECON 2110; GEOG 1301, 1401; POLS 2301, 2501; PSYC 2201; SOCI 2100, SOCI 2101/HMEC 2101; UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (61 hours): BIOL 1111, 1112, 3070, 3500, 3730, 3800, 4440, 4444; CHEM 1131, 1121, 1132, 1122, 3201, 3211, 3301, 3302, 3311, 3312; PHYS 2111, 2112.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000. NOTE: *The College of Arts and Sciences accepts a maximum of two semester hours in physical activity courses toward the fulfillment of its degree requirements.*

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor.

Prerequisite: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by a course of study approved by the dean, or by passing the University approved computer literacy examination.

IMPORTANT NOTE: Only those students who enroll in the School of Medical Technology at St. Francis Hospital, located in Memphis, can qualify for the degree of Bachelor of Science in Medical Technology from Memphis State University.

COURSES NOT APPLICABLE TOWARD B.A., B.S., AND B.S.Ch. DEGREES

CHEM 1100 and MATH 0990 may not be used to fulfill the 132 hour minimum required for degrees offered through The College of Arts and Sciences. However, credit hours in these courses are included in the total hours earned and in the quality point average.

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

Listed below are the specific course requirements for all majors and minors offered in The College of Arts and Sciences. *A minimum grade of C is required in every course applicable toward a major or minor (including corequisites), except in beginning courses and in sophomore English.*

Every student should be aware that the mere completion of courses outlined below with a grade of C or better does not guarantee classification as a major or minor in the discipline concerned; *the student must be recommended by the chair of the department in which the major or minor is sought.* If, in the opinion of the chair, the quality of the student's work is not high enough, additional work, the repetition of courses, or other evidences of acceptable scholarship may be required.

ANTHROPOLOGY

The Major: 30 semester hours in anthropology courses, including ANTH 1100 or 1300, 1200, 3200, 4065; and 18 additional semester hours, at least 6 of which must be at the 4000 level.

The Minor: 18 semester hours in anthropology courses, including ANTH 1100 or 1300, 1200, 3200, and 4065.

Honors Program:

The Department of Anthropology offers an honors program in anthropology to the superior anthropology student who desires a more intensive approach to and knowledge of the discipline, a deeper understanding of research skills, and an opportunity for original criticism and analysis. To be eligible a student must (a) have the approval of the Departmental

Bachelor of Science in Medical Technology

For students interested in careers in medical technology, The College of Arts and Sciences offers a three-year preparatory curriculum, the successful completion of which will qualify them to enter any school of medical technology approved by the American Medical Association Council on Medical Education. After completion of the curriculum in the school of medical technology, the student is eligible for examination and certification by the Reg-

Honors Committee, (b) be an anthropology major, (c) have attained at least junior standing, (d) have completed successfully Anthropology 1100 or 1300, 1200, and one upper-division anthropology course, (e) maintained a cumulative grade point average of at least 3.00 in overall studies, (f) maintained a cumulative grade point average of at least 3.25 in anthropology, (g) completion of four honors courses in anthropology (at least one of which must be an independent study culminating in a research paper/thesis or research report) and a minimum of six hours in honors courses outside anthropology. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Anthropology." Moreover, the student's diploma and the record at Memphis State University will reflect this. Details of the program are available at the Department of Anthropology office.

BIOLOGY

The Major: 36 semester hours in biology courses, including BIOL 1111, 1112, 3070; the election of one of the following areas of concentration and the meeting of the specific requirements for that area; and CHEM 1121, 1122, 1131, 1132, 3301, 3302, 3311, and 3312. Completion of both BIOL 1111 and BIOL 1112 shall be required before enrolling in any upper division course which is acceptable for a major.

BOTANY: One field course chosen from BIOL 3200, 4225, or 4240; one morphology course chosen from 3220, 3222; one physiology course 4232; and upper division hours in biology (chosen in conference with the advisor) to bring the total semester hours in biology to 36.

MICROBIOLOGY: BIOL 3500, 3560; two courses chosen from 4430, 4444, 4501; one course chosen from 4440, 4450, 4451, 4475; and upper division hours in biology (chosen in conference with the advisor) to bring the total semester hours to 36.

INVERTEBRATE ZOOLOGY OR ENTOMOLOGY: BIOL 4840; two courses chosen from 3800, 3900, 3940, 3960, 3965, 4820, 4930; and upper division hours in biology (chosen in conference with the advisor) to bring the total semester hours in biology to 36.

TOXICOLOGY: BIOL 1110, 3030 (or 3730, or 4232), 4002, 4003, 4511, 4512, 4570, and either 3050 or 3500; MATH 1321, 2321, 4611, 4001; CHEM 3201, 3211, 3604; PHYS 2511, 2512.

VERTEBRATE ZOOLOGY: One field course (3050 or 3700); one morphology course (3610 or 3620); one physiology course (3030 or 3730); and upper division hours in biology (chosen in conference with the advisor) to bring the total semester hours in biology to 36.

The Minor: 18 semester hours in biology courses (including BIOL 1111, 1112), 7 of which must be upper division hours. Completion of both BIOL 1111 and 1112 shall be required before enrolling in any upper division course which is acceptable for a minor. Either 3100 or 4100 may be included in meeting requirements, but not both.

Biology majors and minors must earn a minimum grade of C in all biology courses applied toward the major or minor and all required chemistry courses.

CHEMISTRY

(The requirements listed below are for majors and minors for the Bachelor of Arts or Bachelor of Science degrees; for detailed requirements for the Bachelor of Science in Chemistry, a professional degree, see degree requirements described earlier in this section.)

CHEMISTRY

The Major: 32 semester hours in chemistry courses, plus related courses, outlined below:

CHEM 1121, 1122, 1131, 1132, 3201, 3211, 3301, 3302, 3311, 3312, and sufficient additional upper division semester hours. No more than three credit hours of research (CHEM 4991, 4992, 4993) may be counted toward the chemistry requirements.

MATH 1321, and two of the following courses: MATH 2321, 2322, 4611, COMP 4001.

PHYS 2511, 2512 (or 2111, 2112 if approved by the chair of the Department of Chemistry).

The Minor: 20 semester hours in chemistry courses, including CHEM 1121, 1122, 1131, 1132, 3301, 3302, 3311, 3312, and three or four upper division semester hours.

COMPUTER SCIENCE

The Major: 58 to 60 semester hours consisting of MATH 1321, 2321, 2701, 3242, 4614; COMP 1900, 2150, 3160, 3230, 3420, 4030, 4040, 4150, 4270 and an elective sequence which is a coherent package of 17-19 hours of computer-oriented courses designed by the student and the faculty advisor and approved by the Computer Science faculty. PHYS 2511 and 2512 are required for the natural science requirement sequence, and ECON 2120 is strongly recommended as part of the social science requirement for the B.S. degree. This major is offered through the Department of Mathematical Sciences.

The Minor: 21 semester hours in computer science courses, including COMP 1900, 2150, 3230, 3420 and 9 additional upper division semester hours.

CRIMINAL JUSTICE

The Major: 36 semester hours of criminal justice including CJUS 1100, 3128, 3129, 3510, 3521, 3541 and 4110, plus either (1) 15 additional upper division hours in criminal justice, or (2) 12 additional upper division hours in criminal justice and 2110 as approved by the departmental advisor.

The Minor: 18 hours in criminal justice courses including CJUS 1100.

Honors Program:

Criminal Justice majors or minors who have completed a minimum of 55 credit hours with a cumulative grade point average of at least 3.25 overall and in criminal justice are eligible for the Criminal Justice Honors Program. The program requires 18 hours of honors coursework, 6 hours of which must be taken outside the department. The Criminal Justice Honors Program is designed to offer to superior students a flexible curriculum which encourages the development of an individual's abilities to his or her full potential. The program provides for more intensive study and closer faculty contact than is normally available in standard undergraduate classes. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Criminal Justice." Moreover, the student's diploma and the record at Memphis State University will reflect this accomplishment. A detailed description of the program and the admission procedure is available in the office of the Department of Criminology and Criminal Justice.

ECONOMICS

The Major: 30 semester hours, including ECON 1010 or 2110, or 2110, 2120, 3310, 3320, 4920, and 15 additional upper division semester hours in economics courses as approved by the department advisor.

The Minor: 18 semester hours in economics courses, including ECON 1010 or 2110, 2120, 3310, 3320, and six additional upper division hours as approved by the department advisor.

Honors Program:

All students who receive a grade of B or better in ECON 2110 or 2120 honors sections are eligible for the honors program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Economics Departmental Honors Committee. A student must maintain an average grade of at least 3.25 in economics to continue in the program and must have an average grade of 3.5 or better in economics to graduate with honors in economics.

Honor students take special courses during the junior and senior years, particularly the honors sections of ECON 3310 and 3320, and write a senior research paper. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Economics." Moreover, the student's diploma and the record at Memphis State University will reflect this. Details of the program are available in the Economics Department office.

ENGLISH

The Major: 36 semester hours of English, including 9 hours lower division (University requirement) and 27 hours above the 2000 level; 3 hours of British literature (chosen from among 3211, 3212, 3213, 3214, 3221, 3222, 3224, 4231, 4232, 4233, 4234); 3 hours of American literature (chosen from among 3321, 3322, 4321, 4322); completion of the requirements for one of the following seven concentrations (9-12 hours): British Literature, American Literature, Modern Literature, Language and Linguistics, Creative Writing, Professional Writing, or English as a Second Language; 9-12 hours of upper division English electives. Students should see English advisers, who will explain the advantages of the various concentrations and assist students in developing an appropriate program.

The Minor: 12 upper division semester hours in English in one of the following areas: Literature, Language and Linguistics, or Writing.

NOTE: Students who wish to satisfy the requirements for both the English major and endorsement to teach English in high school should consult the College of Education for certification requirements.

Students who intend to pursue graduate studies in English are strongly advised to elect courses which will ensure a comprehensive overview of the major figures and movements in British and American literature and of modern language theory.

Honors Program:

Freshman students with high ACT scores are issued invitations to participate in the honors program, which is open to all qualified students during the freshman and sophomore years. During the junior and senior years, it is restricted to English majors; students are eligible to apply for admission to the program if they have a grade point average of 3.25 in their overall studies and in English. Honor students take special courses during the junior and senior years and write a senior research paper. Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in English." Moreover, the student's diploma and the record at Memphis State University will reflect this distinction. Details of the program are available at the English Department office.

FOREIGN LANGUAGES

The Major: Successful completion of one of the following concentrations: (1) A single-language concentration in French, German, Latin, Russian or Spanish: 24 upper division semester hours. (2) A two-language concentration chosen from French, German, Greek, Italian, Latin, Russian, and Spanish: 27 upper division semester hours with a minimum of 9 semester hours in each language. (3) A three-language concentration: All three language concentrations require prior consultation with the approval of the department chairman. Plans will normally include at least 33 upper division semester hours to include at least 12 semester hours in each of two languages plus approved course work in a third language.

NOTE: With the consent of the International Business advisor and an advisor in the Department of Foreign Languages and Literatures, Foreign Languages may also be a collateral major for the B.B.A. degree with a major in International Business.

NOTE: With the approval of the Head of the Classics Section, up to 6 credit hours in upper division Classics courses may be applied toward a concentration in Greek or Latin.

Any major in Foreign Languages may earn a collateral minor in International Business. These Foreign Language majors should take the following sequences of upper division courses: Advanced Conversation and Composition (6 hours) and the two courses for Commerce given by the individual languages. Students will have a minimum of six more credits to be taken from other upper division courses.

The minor in International Business will have at least 18 semester hours within the Fogelman College of Business and Economics. Notice that the courses listed in the Business and Economics section are all upper division and require corresponding lower division courses. Therefore, a minor will include, normally, 9 hours from this list and another 9 hours of lower division courses taken as prerequisites.

Please consult with your advisor and with the advisor of the International Business program regarding any matter concerning the curriculum program or graduation requirements.

The Minor: 21 semester hours from A and B, below

A. Courses numbered 1101, 1102, 2201, and either 2202 or 2203 (or their equivalents) in the foreign language in which upper division hours are to be taken.

B. 9 upper division semester hours in one of the following languages: French, German, Latin, Greek, Italian, Russian, or Spanish.

*A concentration in Russian requires a collateral foreign language concentration or a collateral major outside the Department of Foreign Languages and Literatures.

GEOGRAPHY

The Major: 35 semester hours in geography courses including one course from each of the core subject areas for a total of 20 hours and completion of the requirements in one of the following areas of concentration:

Core Requirements:

- a. Environmental and Earth Science: GEOG 1101 and 1102 (8)
- b. Human: GEOG 1401, or 3430 (3)
- c. Regional: GEOG 1301 or any 43-- numbered course (3)
- d. Cartography: GEOG 3503 (3)
- e. GEOG 4801 (3)

Concentrations:

GEOGRAPHY: 15 semester hours of geography with a minimum of 12 upper division hours.

ENVIRONMENTAL AND EARTH SCIENCE: 15 semester hours of geography with a minimum of 12 upper division hours selected from GEOG 3221, 4111, 4121, 4122, 4131, 4201, 4211, 4231, and 4251.

CARTOGRAPHY: 15 semester hours of geography with a minimum of 12 upper division hours selected from GEOG 3501, 3503, 4502, 4503, 4510, 4511, and 4531.

URBAN GEOGRAPHY: 15 semester hours of geography with a minimum of 12 upper division hours selected from GEOG 3430, 3451, 4201, 4431, 4442, 4443, and 4531.

APPLIED GEOGRAPHY FOR BUSINESS AND PLANNING (33 semester hours): Requirements include GEOG 4431, 4521, 4531, FIR 3130, and FIR 3310 or 3410, MKTG 3010 and ACT 2010; two courses selected from GEOG 3451, 4201, 4424, 4443, or 4551; one course selected from GEOG 4203, 4434, or 4453; and one course selected from GEOG 4502, 4503, 4510, or 4511.

Students in this concentration must satisfy geography major core requirements by taking GEOG 1101 or 1102, GEOG 1401 or 3430, GEOG 3503, and 3 semester hours in any regional course. This concentration applies toward the Bachelor of Arts degree only. Students must include ECON 2110 and 2120 as a part of the Social Science requirement.

The Minor: 20 semester hours in geography courses, at least 9 of which must be upper division hours.

GEOLOGICAL SCIENCES

The Major: Students must complete GEOL 1101, 3301, 3512, and 4622 and select either of the following concentrations:

GEOLOGY: GEOL 1102, 3302, 3211, 3712, and additional upper division semester hours as approved by the advisor to a total of 36 semester hours; CHEM 1111, 1112; MATH 1321; PHYS 2111, 2112 or 2511, 2512.

GEOPHYSICS: GEOP 4101, 4201, 4401 and additional upper division semester hours to total 36 semester hours; MATH 1321, 2321, 2322, 3391; PHYS 2511, 2512.

The Minor: A minimum of 18 semester hours in geology courses, including GEOL 1102. Six of these hours must be selected from upper division courses.

HISTORY

The Major: 30 semester hours in history courses, including HIST 1301, 1302, 2601, 2602, and 18 additional upper division semester hours. Of the 18



upper division hours required for the major, a maximum of 12 may be taken in any one field (United States, Latin American, Ancient/Byzantine, European, Russian, Far Eastern, African).

The Minor: 21 semester hours in history courses, including HIST 1301, 1302, 2601, 2602, and 9 additional upper division semester hours.

Honors Program:

History majors who have attained junior standing, have completed successfully six semester hours of lower division history, and have maintained a grade point average of at least 3.25 in overall studies and in history courses taken, are eligible for admission to the honors program in history. Students admitted to the program will take 12 hours of honors work in history, including History 4003 and History 4996, during their junior and senior years. Those who successfully complete the program and the regular B.A. requirements will have their degree conferred "With Honors in History." The student's diploma and the record at Memphis State University will be similarly endorsed. A detailed description of the program, together with application forms for admission, may be obtained in the History Department office.

INTERNATIONAL RELATIONS

The International Relations program provides the opportunity to bring the knowledge of several traditional disciplines to bear upon a focal point of human relationships and problems which cross national and cultural boundaries. The program is designed to serve the student who seeks knowledge of the range of contemporary and possible future problems which confront international society and an understanding of alternative national and cultural perspectives on solutions to those problems. The program also serves the needs of students planning a career in the Foreign Service or related agencies of the federal government and students preparing for employment abroad in the private sector, or in international organizations, private or public.

International Relations is offered as a major only. The program emphasis is on the course work in history, political science, economics, and geography, with contributions from other social science disciplines and art. Within the program, the student is required to concentrate a part of the work

in the field of American foreign policy or in one of five areas of the world. Students are encouraged to pursue the study of a foreign language and to seek opportunities for travel and study abroad. The student's program should be planned in consultation with the Coordinator of International Relations. Course requirements are listed below.

The Major: 33 semester hours, including ECON 4350; POLS 2501 and 4508; HIST 4260; INTL 4601; at least one course in International Political Processes (POLS 3505, 4501, or 4504); at least one course in International Economic Processes (ECON 3580 or 4340, GEOG 3430, or POLS 4510); at least one course in International Development Processes (ANTH 3721, ECON 3580, or SOCI 2100); and three courses, in at least two disciplines, from one of the following areas of concentration:

- (a) *American Foreign Policy:* HIST 3803, 3811; POLS 2301, 3506, 4506.
- (b) *Western Europe:* GEOG 4304; HIST 3302, 3506, 4145, 4461; POLS 3302.
- (c) *Latin America:* ANTH 3232; ART 4162; GEOG 4324, 4325; HIST 3212; POLS 3306.
- (d) *Asia:* GEOG 4306; HIST 3291, 4292, 4294, 4295; PHIL 3721; POLS 4307.
- (e) *Soviet Union:* GEOG 4305; HIST 4162, 4163; POLS 4305, 4502, 4505.
- (f) *Sub-Saharan Africa:* ANTH 3242, 3342; HIST 4281, 4283.
- (g) *Middle East and North Africa:* HIST 3271, 4282; POLS 3309.

NOTE: The student electing the major in International Relations is advised to take the following courses to insure that he has an adequate background for the required courses in the major: ECON 1010, 2110; HIST 1301, 1302, INTL 1101, 1102.

MATHEMATICAL SCIENCES

The Major: 36 semester hours in mathematical science courses including MATH 1321, 2321, 2322, and 3242 (for departmental honors students, 37 or 40 semester hours including MATH 1401, 1402, 2401, and 2402); CHEM 1111 and 1112 or PHYS 2511 and 2512 (for honor students, two approved one-semester courses containing significant mathematical applications, taken in a department other than Mathematical Sciences); and completion of the requirements in one of the following areas of concentration.

MATHEMATICS: MATH 2701, 4350; three of the following courses—MATH 4261, 4351, 4361 and 4411; and 6 upper division semester hours of electives in the mathematical sciences.

APPLIED MATHEMATICS: MATH 2701, 3391, 4350, 4391, 4721 and six upper division semester hours from the following list: 4242, 4261, 4271, 4351, 4381, 4382, 4361, 4390, 4635, 4741. MATH 4381, 4382, and 4635 are especially recommended.

STATISTICS: MATH 4611, 4612, 4613, 4635, COMP 4001; and 6 upper division semester hours of electives in the mathematical sciences.

The Minor: 18 semester hours in mathematical sciences courses, including MATH 1321, 2321, 2322 and 6 upper division hours.

Honors Program:

The Department of Mathematical Sciences offers an honors program in mathematics for the talented student who desires to achieve mathematical maturity at a rate consistent with his own exceptional ability. In the first year of this program, the student will investigate calculus from a theoretical viewpoint. The second year will consist of exploring in depth the fundamental concepts of contemporary mathematics. After completion of this two-year sequence, the participant will be treated as a mature student of mathematics and will be allowed to register for any course in mathematical sciences at the B.S. or M.S. level (subject to the regulation of the Graduate School concerning combination undergraduate-graduate students as set forth on page five of Policies of the Graduate School) regardless of the formal course prerequisites. The second two years of the honors program are thus characterized by a high degree of flexibility and mathematical maturation. Specific requirements are as follow:

1. MATH 1401, 1402, 2401, 2402 (in lieu of 1321, 2321, 2322, and 3242).
2. At least two approved one-semester courses containing significant mathematical applications, taken in a department other than Mathematical Sciences.
3. A minimum of 21 hours of upper-division courses in Mathematical Sciences, including Senior Honors Seminar, with a QPA of 3.5 or better in these courses; courses to be determined in consultation with the student's advisor and with the approval of the departmental Honors Committee.

Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Mathematical Sciences." Moreover, the student's diploma and the record at Memphis State University will reflect this. The Honors Committee of the Department of Mathematical Sciences will make all decisions concerning admissions to the program.

PHILOSOPHY

The Major: 30 semester hours in philosophy courses including PHIL 1101 or 1102, 1611, 3001, 3002, 3411 or 3511 and 15 additional upper division semester hours.

The Minor: 18 semester hours in philosophy courses, including PHIL 1101 or 1102, 1611, and 12 upper division semester hours. In consultation with the coordinator of undergraduate studies in Philosophy, a student may design a minor (18 hours) that applies to the student's major area of study.

Honors Program:

This program is open to philosophy majors with a 3.0 overall average and a 3.5 average in philosophy. The student will complete, with a grade of B or better a thesis submitted for credit in PHIL 4891. The thesis topic must be approved by the thesis director before the student registers for PHIL 4891.

Those students who complete the program and the regular college requirements will be recognized at the commencement ceremony by having their degree conferred "With Honors in Philosophy." Moreover, the student's diploma and record at Memphis State University will reflect this distinction.

PHYSICS

The Major: 37 semester hours in physics courses, including PHYS 2511, 2512 (PHYS 2111, 2112 are acceptable but not recommended), PHYS 3010, 3011, 3111, 3211, 3610, 3611, 4510, 4211, 4410 and six additional hours of upper division electives. CHEM 1121, 1122, 1131, 1132; MATH 1321, 2321, 2322, and 3391, or equivalent courses.

The Minor: 20 semester hours in physics courses, including PHYS 2511, 2512 (PHYS 2111, 2112 are acceptable but not recommended), and additional upper division hours.

POLITICAL SCIENCE

The Major: 33 semester hours in political science courses, including POLS 1100, 1101, 2301, and 2501, and completion of requirements for one of the concentrations below:

POLITICAL SCIENCE: POLS 3100 and a minimum of 18 semester hours in upper-division courses distributed across at least three of the following areas: American Government, Public Law, Political Theory, International Relations, Comparative Politics, and Public Administration. Only 9 semester hours of internship courses may be counted toward the 33 semester hour requirement.

PUBLIC ADMINISTRATION: Either POLS 3211 or 3224, plus 3601, 4101, and a minimum of 12 additional semester hours in political science. Only 9 semester hours of internship courses may be counted toward the 33 semester hour requirement.

NOTE: Any major in Political Science may earn a second major in International Studies. Political Science courses in international relations and comparative government fulfill requirements for both the political science major and the major in international relations within the international studies program.

The Minors:

POLITICAL SCIENCE: 18 semester hours in political science courses, including POLS 1100, 1101 or 2301 or 2501, and 12 additional semester hours, 9 of which must be in upper division courses. Only 6 semester hours of internship courses may be counted toward the 18 semester hour requirement.

PUBLIC ADMINISTRATION: 18 semester hours in political science courses including POLS 1100, 3601 and 12 additional semester hours to be selected from the following: POLS 3211, 3213, 3224, 4213, 4214, 4221, 4224, 4231, 4602, 4603, 4604, 4611, and 4702. Only 6 semester hours of internship courses may be counted toward the 18 semester hour requirement.

Honors Program:

The department offers an honors program to qualified majors who choose to pursue a more sophisticated knowledge of the discipline, a more rigorous level of analysis, and a deeper understanding of politics. Students who have completed about 55 hours of course work (with at least 9 hours in Political Science) and have a minimum over-all grade point average of 3.0 (with a minimum in Political Science of 3.25), or can present equivalent qualifications, are invited to apply for admission to the program. The program requires 18 hours of honors course work, 12 or more of which must be upper-division Political Science courses, and minimum final grade point averages of 3.00 overall, 3.25 in Political Science, and 3.25 in honors coursework. Those students who complete

the program and the regular college requirements will be recognized at the commencement ceremony by having their degrees conferred "With Honors in Political Science." Moreover, the student's diploma and the record at Memphis State University will reflect this distinction. Details of the program are available in the Political Science Office.

PSYCHOLOGY

The Major: 35 semester hours in psychology courses, including PSYC 1101, 1102, 3001, 3002, 4101; at least one course each from the 31 —, the 33 —, and the 35 —, series; and 9 additional hours at or above the 3000 level.

The Minor: 20 semester hours in psychology, including PSYC 1101, 1102, 3001 (or equivalent), 3002, and 6 additional hours at or above the 3000 level.

SOCIOLOGY AND SOCIAL WORK

SOCIOLOGY

The Major: 30 semester hours in sociology, including SOCI 1111, 3311, 3322, 4210 or 4211, and completion of requirements in one of the following areas of concentration.

GENERAL SOCIOLOGY: 18 additional semester hours in sociology including at least 9 upper division hours.

CONFLICT AND CHANGE IN MODERN SOCIETY: 18 additional semester hours as follows: SOCI 4340 (3); one course from each of the following groups (9) - Sources of Inequality: SOCI 3401, 3422, 4420, 4442, or 4460; Institutions and Change: SOCI 3820, 3860, 4631; Social Structure of Industry: SOCI 3801 or 4842; and two Sociology and Social Work electives (6).

LIFE CYCLE STUDIES: 18 additional semester hours as follows: SOCI 3902, 4541, and 4923 (9); one course from each of the following areas (9): Methods of Life Cycle Research: SOCI 4312, or 4340; Structural Context of Life Cycle Development: SOCI 3401, 3801, 4442, 4631, or 4842; Problem Areas in Life Cycle Development: SOCI 3422, 3432, 3501, 3521, 4420, 4460, or 4852.

SOCIOLOGY OF THE SOUTH: 18 additional semester hours as follows: SOCI 3420, 4340, 4460, (9); three courses from the following (9): SOCI 2911, 3401, 3422, 3432, 3521, 3801, 3831, 3860, 4420, 4442, 4541, or 4631.

The Minor:

SOCIOLOGY: 18 semester hours in sociology, including SOCI 1111.

SOCIAL WORK

The Major: 34 semester hours including SWRK 2911, 3901, 3902, 3903, 3904, 3905, 3930, 4830, 4831, 4840, 4841, 4932, and one upper division course in social research. BIOL 1101 is required.

The Minor: 18 semester hours in sociology and social work courses, including SWRK 2911, 3901, 3902, and 9 additional upper division semester hours in social work courses.

NOTE: The B.A. degree in Social Work program is accredited by the Council on Social Work Education and is designed to prepare students for beginning professional practice. This curriculum also provides a strong foundation for students wishing to pursue study at the graduate level. Social service experience may not be substituted for any social work course. All social work majors are required to have a social work faculty advisor. The Social Work degree is granted only to students who have successfully completed the program in its entirety.

Arts and Sciences Course Descriptions

ANTHROPOLOGY

PROFESSOR

CHARLES WILLIAMS, Ph.D., *Interim Chair*
Room 129, Clement Hall

E010 ANTHROPOLOGY (ANTH)

1100. Human Origins and Variation. (3). Biological basis for understanding of humans; fossil record and origins of humans, human society and culture; primate models and human behavior today; race and other human variation today. [G].

1200. Cultural Anthropology. (3). Origin and development of human culture. Social relations, language, government, religion and ritual, and problems of developing nations or minority groups in modern world. [G].

1300. Heritage of World Civilizations: pre-A.D. 1500. (3). Introduction to methods and principles of archaeology and cultural anthropology. Origin and early development of the major civilizations of the world, with emphasis on the evolution and interrelationships of basic institutions of civil society.

3035. Indians of the Mid-South. (3). Archaeology and ethnology of Southeast; intensive study of various Indian cultures of Tennessee and bordering states.

3111. Human Paleontology. (3). Hominid fossil record starting with primate developments; human evolution; human osteology.

3200. Peoples and Cultures of the World. (3). (Same as GEOG 3200). Major ethnographic areas and selected cultures of the world.

3225. Qualitative Methods of Field Research. (3). Various qualitative methods of anthropological research. Application in collecting life histories and writing ethnographic descriptions of contemporary societies.

3231. Indians of North America. (3). Description and distribution of aboriginal culture types of North America north of Mexico; comparisons and interrelationships during preand post-contact periods.

3232. Peoples of Latin America. (3). Description and distribution of peoples and cultures of South America and Mesoamerica; comparisons and interrelationships during preand post-contact periods.

3242. Peoples of Africa. (3). Description and distribution of peoples and cultures of Africa; comparisons and inter-relationships during pre- and post-contact periods.

3272. Peoples of the South Pacific. (3). Description of peoples and cultures of Oceania (including Australia); comparisons and inter-relationships during pre- and post-contact periods.

3282. Cultural History of American Communities. (3). Cultural historic interpretation of formation, development and transformation of diverse community life-patterns in America; emphasis on analysis of community as it reflects change in settlement patterns, kinship networks, political, religious, economic and value systems in American society. [G].

3332. Archaeology of Latin America. (3). Description and distribution of prehistoric cultural remains in South America and Mesoamerica, with emphasis on Mexico and Peru.

3342. Archaeology of Africa. (3). Description and distribution of archaeological remains in Africa; major regional sequences, extending from earliest evidences of human occupation until historic times. Emphasis on cultural achievements of pre-colonial Africa.

3351. Archaeology of Europe and Asia. (3). European and Asian cultures from first humans to early civilizations.

3511. Culture, Kin and Family. (3). Changing structure of family in Western and non-Western societies; cross-cultural approaches to mate selection, courtship rituals, kinship organization, institution of marriage, division of labor and authority in household, and childbearing; variation and flexibility in family

structures as adaptive strategies for environmental, social and cultural change.

3711. Culture and Technology. (3). Anthropological survey of development of technology and its impact on organization of industry and work from prehistoric through post-industrial societies. Consideration of such current issues as public control of technology, labor market segmentation, and quality of working life, in context of comparative analysis of both pre-industrial and industrial societies.

3721. Peasants in the World Economy. (3). Cross-cultural survey of state and global societies as they influence peasants in different regions; technological, environmental, economic, political and interpersonal factors shaping peasant livelihood, social organization, culture and worldview; national and international forces of change in relation to role of anthropology in development.

4051-6051. Anthropology and Education. (3). (Same as EDFD 4051). Advanced study of cultural transmission process with emphasis on identifying differing behavioral, cognitive and learning styles of various ethnic groups within American society and selected third world countries. Encounters of U.S. subcultural groups with public education system. PREREQUISITE: permission of instructor.

4065-6065. Contemporary Anthropological Theory. (3). Contemporary growth of theories and methods in anthropology.

4111-6111. Human Adaptations. (3). Human populations and their variability; examination of human adaptations in locomotion and manipulation, facial structure, brain and language, and reproduction; comparisons to anatomy, physiology, and behavior of other primates.

4251-6251. Psychological Anthropology. (3). (4751). Comparison of factors involved in analysis of personality as contrasted to culture; interaction of these factors; problems of studying personality cross-culturally.

4252-6252. Economic Anthropology. (3). Comparative analysis of economic systems and their functional relationships to other cultural institutions; production, distribution, and consumption; concepts of wealth, value, property, and ownership.

4253-6253. Anthropology of Religion. (3). Comparative analysis of religious systems and their functional relationships to other cultural institutions; inter-relations of myth, magic, and ritual; types of religious institutions and religious practitioners.

4255-6255. Applied Anthropology and Development. (3). Cross-cultural review of processes of change, grassroots development and planning in the industrialized world; models of change, specializations in applied anthropology, and development of public policy on international issues of housing, education, health and economic development.

4260. Field Problems in Research. (3). Application of social science knowledge and methods to research projects in local community or region; development of individual projects according to student's concentration, or work in cooperation with social and human services agencies and other community organizations.

4301-6301. Archaeology of North America. (3). (3331). Description and distribution of prehistoric cultural remains in North America north of Mexico. Major regional sequences, extending from the earliest evidences of human occupation until historic times.

4311-6311. Archaeological Theory and Method. (3). History of archaeology and development of conceptual framework for archaeological data collection and interpretation; current theories and methods including the use of allied specialists.

4325-6325. Archaeological Field Techniques. (3). Instruction in field excavation, specimen preparation, use of survey instruments and photography, map making, archaeological record keeping. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

4326-6326. Archaeological Laboratory Analysis. (3). Methods and techniques of archaeology laboratory; emphasis on preparation of artifacts and records for

interpretation and curation. May be repeated for a maximum of 6 hours credit. PREREQUISITE: permission of instructor.

4330-39-6330-39. Special Topics in Regional Archaeology. (3). Analysis of selected topics in archaeology of specific region. May be repeated for maximum of six hours credit.

4351-6351. Evolution of Civilization. (3). Comparative investigation of origins of civilization in Old and New Worlds. Development and study of models to explain cultural, social, political, and other changes that lead to and define civilization.

4370-6370. Historic Archaeology. (3). Review of contributions of archaeologists to historical research. Methods and techniques of archaeologists as required and modified by excavation and interpretation of historic materials. Allied specialties unique to Historic Archaeology including documentary investigations and conservation and restoration of existing structures.

4380-6380. Museology. (3). (Same as ART 4380). History and development of museums; mandate and variety of institutions; significant research facilities; historical and contemporary collections, and the educational roles of museums in contemporary society.

4382-6382. Museum Operation. (3). (Same as ART 4382). Basic aspects of museum organization, management, exhibit planning and execution, and maintenance of collections and records.

4411-6411. Urban Anthropology. (3). Anthropological studies of pre-industrial and industrial cities. Urbanization, movements of social transformation and other processes of adjustment to urban milieu. Urban slums, ethnic enclaves and housing developments in cross-cultural perspective. Urban kinship and social organization. Urban community development. Urban research techniques.

4420-6420. American Folklore. (3). Selected genres of American folklore, including folk religion and belief, folk medicine, folksong and music, narrative and humor (jokes and riddles). Comparisons to other cultures. Emphasis on role of folklore in maintenance of tradition, in social change, and in concept of culture.

4511-6511. Medical Anthropology. (3). Crosscultural analysis of bio-behavioral components of infectious, nutritional, genetic, chronic and psychiatric diseases. Individual and cultural reactions to medical care, professionals and health care delivery systems.

4521-6521. Folk Medicine in the U.S. (3). Medical alternatives to standard health care system. Concepts of illness associated with such practices as use of medicinal plants, faith healing, chiropractic. Clinical effectiveness of folk herbal medicine and psychotherapy. Health professional's role in caring for persons with different perceptions of health and disease emphasized.

4531-6531. Alcohol, Culture, and Biology. (3). Cross-cultural comparison of beliefs, rituals, meaning of alcohol consumption and alcoholism. Examination of biological and cultural evidence for development of alcohol-related problems. Implications for prevention, early intervention, and treatment.

4541-6541. Nutritional Anthropology. (3). Human nutrition in cross cultural perspective. Basic nutritional requirements. Interrelations of dietary behavior with resource availability and with cultural attitudes regarding nutritive and health values for foods. Dietary aspects of acculturation and culture change. Methodology in assessment of nutritional status and nutritional insufficiencies. Exemplary case studies.

4551-6551. Culture and Childbirth. (3). Review of biological, environmental, social and cultural factors influencing human reproduction; individual, community and clinical approaches to fertility, birth control, pregnancy, birth and post-partum care; alternative delivery systems.

4561-6561. Cultural Context of Deviant Behavior. (3). Reviews perceptions of normality in different societies, cultural definitions of and responses to deviance, promotion and discouragement of inappropriate behavior; evaluates mental illness, violence, drug abuse, cannibalism, suicide, sexual practices and everyday behavior in relation to cultural definitions of normality.

4975. Directed Individual Readings. (1-4). Intensive guided survey of anthropological and related literature dealing with topics selected by advanced students and accepted by staff. Compilation, synthesis, and evaluation of published data; preparation for students considering anthropology as a profession. PREREQ-USITE: permission of chair and designated staff.

4985. Directed Individual Research. (1-3). Intensive guided survey of original data, in areas selected by advanced students and accepted by staff. Collection and/or processing of data in physical anthropology, ethnology, applied and urban anthropology, archaeology, and linguistics; description, classification, analysis, and synthesis. Preparation for publication. PREREQ-USITE: permission of chair and designated staff.

4990-99-6990-99. Special Topics in Anthropology. (3). May be repeated for credit when topic varies.

BIOLOGY

PROFESSOR

JAMES F. PAYNE, Chair
201B, Life Science Building

ADVANCED PLACEMENT

Beginning freshmen who have completed an advanced biology course in high school may apply to the chair of the Department of Biology, during the semester preceding enrollment, for advanced placement.

E060 BIOLOGY (BIOL)

1101. A Human Perspective I. (4). A study of the biosphere and structure and function of its plants and animals. NOTE: Credit will not apply toward a major or minor in the sciences, nor will it satisfy any part of science requirements in pre-professional curricula. *Three lecture, two laboratory/activity hours per week. [G].*

1102. A Human Perspective II. (4). Continuation of study of our biosphere with emphasis on organism and continuity and diversity of species. *Three lecture, two laboratory/activity hours per week. PREREQUISITE: BIOL 1101. [G].*

1110. Introduction to Toxicology. (2). Survey of field of toxicology; interdisciplinary aspects.

1111. General Biology I. (4). Unifying principles of biology with emphasis on cell structure, cell function, heredity, development and evolution. *Three lecture, two laboratory hours per week. [G].*

1112. General Biology II. (4). Continuation of BIOL 1111 with emphasis on origin and diversity of life; structure, function, and ecology of organisms. *Three lecture, two laboratory hours per week. [G].*

1400. Microbiology. (4). Microorganisms and their basic characteristics with emphasis on relationship to pathogenesis and disease prevention. Credit not acceptable for Biology major or minor. *Three lecture, two laboratory hours per week.*

1731. Anatomy and Physiology I. (4). Detailed study of structure and functions of human organism. Credit not acceptable for Biology major or minor. *Three lecture, two laboratory hours per week.*

1732. Anatomy and Physiology II. (4). Continuation of BIOL 1731. Credit not acceptable for Biology major or minor. *Three lecture, two laboratory hours per week. PREREQUISITE: BIOL 1731 or equivalent.*

2232. General Horticulture. (3). Major aspects of horticulture with emphasis on growing ornamental plants, propagation, disease control, nutrition, pruning, soils and greenhouse management. *Two lecture, two laboratory hours per week. PREREQUISITE: BIOL 1112 or equivalent or permission of instructor.*

3030. Principles of Animal Physiology. (4). Basic concepts of animal function, including study of many invertebrate phyla and most classes of vertebrate organisms. *Two lecture, four laboratory hours per week. PREREQUISITE: 8 hours of animal biology or equivalent and COREQUISITE: CHEM 3311.*

3050. General Ecology. (4). Relationships between organisms and their environment; emphasis on fundamental principles. Topics include: nutrient cycles, limiting factors, population dynamics, community succession and structure, species interactions, and

human ecology. *Two lecture, four laboratory hours per week.*

3070. Genetics. (4). Principles of heredity, including laboratory experiments in *Drosophila* breeding. *Three lecture, three laboratory hours per week.*

3071. Human Genetics. (3). Genetic principles as they apply to humans, including pedigree analysis, genetic counseling, genetic engineering, and eugenics. *Three lecture hours per week. PREREQUISITES: BIOL 1112 or permission of the instructor.*

3100. History of Biology. (3). Development of science of biology, considering work of outstanding biologists and influence of their contributions. PREREQUISITE: 16 semester hours in biology or permission of instructor.

3170. Heredity. (3). Principles of heredity with applications to human problems, for non-science majors and recommended for students who desire a better understanding of heredity and eugenics. *Not acceptable as credit toward biology major or minor.*

3200. General Botany. (4). Structure, function and diversity of plants. *Two lecture, four laboratory hours per week.*

3220. General Plant Anatomy. (4). Comparative development and structure of roots, stems, and leaves in flowering plants. *Two lecture, four laboratory hours per week. PREREQUISITE: BIOL 3200 or consent of instructor.*

3222. Morphology of Vascular Plants. (4). Comparative study of the life cycles, development, structure, reproduction, and phylogeny of vascular plants from most primitive to most advanced. *Two lecture, four laboratory hours per week. PREREQUISITE: BIOL 3200 or consent of instructor.*

3440. Pathophysiology. (3). Effects of pathogenic organism upon human body and abnormalities in physiological processes occurring during disease. (Primarily for nursing students.)

3500. General Microbiology. (5). Fundamentals of bacteriology. *Three lecture, four laboratory hours per week.*

3560. Applied Microbiology. (4). Introduction to microbiology of water, soil, air, food, sewage, industrial processes, and pathogens. *Two lecture, four laboratory hours per week. PREREQUISITE: BIOL 3500 or equivalent.*

3610. Vertebrate Embryology. (4). Development of selected vertebrate embryos from fertilized egg cell. *Two lecture, four laboratory hours per week.*

3620. Comparative Anatomy of Vertebrates. (5). Origin, development, structure, and functions of organs and systems of selected forms of vertebrates. *Two lecture, six laboratory hours per week. PREREQUISITE: BIOL 1112 or permission of instructor.*

3700. Vertebrate Zoology. (4). Life histories, adaptations, ecology, distribution, behavior, and classification of vertebrates. *Two lecture, four laboratory hours per week.*

3730. Human Physiology. (4). Normal functions of human body. *Three lecture, two laboratory hours per week.*

3800. Parasitology. (4). Distribution, morphology, life history, economic importance, and control of some of parasites of man and domestic animals. Protozoa through helminths. *Two lecture, four laboratory hours per week.*

3900. General Entomology. (4). Introduction to insects with emphasis on morphology, physiology, development, behavior, and ecology. *Three lecture, three laboratory hours per week.*

3940. Systematic Entomology. (4). Classification of insects, interpretation and use of keys, and preparation of a representative collection. Extended field trips to be arranged. *Two lecture, four laboratory hours per week.*

3960. Medical Entomology. (4). Distribution, morphology, life history, medical importance, and control of insects and other arthropods which serve as vectors for disease-producing organisms. *Two lecture, four laboratory hours per week.*

3965. Pest Control. (4). Recognition, life history, habits, and control of insect pests attacking stored grain, wood, fabrics, food products and animals. Includes some non-insect pests, such as noxious birds, rodents, and snakes. *Two lecture, four laboratory hours per week. PREREQUISITE: permission of instructor.*

4000. Research. (1-4). Consultation, reading, and laboratory or field work to investigate selected area of biology under supervision of faculty member; formal paper is required. May be repeated for maximum credit of 4 hours. (S/U).

4002-6002. Toxicology. (3). Effects of foreign substances on biological mechanisms. Absorption, excretion, metabolism, and biotransformation of potentially harmful substances. PREREQUISITE OR COREQUISITE: CHEM 3312.

4003-6003. Experimental Toxicology. (4). Advanced aspects of toxicology; instrumentation, organism culturing, and procedures involved in the assessment of relative toxicity. *Two lecture, four laboratory hours per week. PREREQUISITE: BIOL 4002. COREQUISITE: CHEM 4511 or consent of instructor.*

4050-6050. Field Technique in Ecology. (4). Field techniques of applied ecology covering practical training in forest, field, aquatic, and atmospheric sampling and analysis. Extended field trips. *Two lecture, four laboratory hours per week. PREREQUISITE: consent of instructor.*

4055-6055. Ecological and Environmental Issues. (3). Ecological perspective on current environmental issues such as conservation and biodiversity, global climatic change, regulation of chemicals in environment. *Three lecture hours per week. PREREQUISITE: BIOL 3050 or consent of instructor.*

4060-6060. Limnology. (4). Physical and chemical attributes of lakes, ponds, and streams; organisms of fresh water; problems of production; practical training in limnological methods and identification of organisms. *Two lecture, four laboratory hours per week. PREREQUISITE: BIOL 1112 and one year of chemistry.*

4080-6080. Radiation Biology. (4). Origin and characteristics of ionizing radiations with detailed discussion of radiation effects upon life processes from molecular to ecosystem level. *Three lecture, two laboratory hours per week. PREREQUISITES: CHEM 3311 or 3312; BIOL 3070.*

4090-99. Special Topics in Biology. (1-3). Topics are varied and announced in *Schedule of Classes*. May be repeated with different topics for maximum of 4 hours. PREREQUISITE: junior standing and permission of instructor.

4100-6100. Evolution. (3). Synthesis of principles and concepts of modern evolutionary theory. Topics include geologic evolution, biological evaluation, and evolution of societies. Emphasis on recent development and current controversies. *Three lecture hours per week.*

4130-6130. Cell and Molecular Biology. (4). Introduction to principles of molecular biology; of ultrastructure, intracellular metabolism, gene structure and function, and cell differentiation. *Four lecture hours per week. PREREQUISITES: BIOL 1111 or equivalent, BIOL 3070 and CHEM 3312.*

4151-6151. Developmental Biology. (5). Introduction to study of developing biological systems at cellular and molecular level. *Three lecture, four laboratory hours per week. PREREQUISITES: BIOL 3070, CHEM 3312.*

4225-6225. Mycology. (4). Basic life cycles, morphology and classification of fungi. Interaction of fungal organisms in environment. *Two lecture, four laboratory hours per week. PREREQUISITE: BIOL 1111 or equivalent or consent of instructor.*

4231-6231. Plant Physiology. (4). Principles of physiology and their application to lower plant groups, exclusive of bacteria and related forms. *Two lecture, four laboratory hours per week. PREREQUISITE: BIOL 3200 or its equivalent.*

4232-6232. Plant Physiology. (4). Principles of physiology and application to living organisms; emphasis on higher plants. *Three lecture, three laboratory hours per week. PREREQUISITE: BIOL 3200 or consent of instructor.*

4240-6240. Plant Taxonomy. (4). Principles of plant taxonomy; special attention to classification of selected vascular plant families. *Lectures, laboratory hours, and field trips. PREREQUISITE: BIOL 3200 or consent of instructor.*

4242. Woody Plants of the Mid-South. (3). Identification and classification of trees, shrubs and woody vines of Tennessee and adjacent Arkansas, western Kentucky, southeastern Missouri and northern Mississippi; emphasis on both native and cultivated woody species. Identification primarily of plants in summer condition, but also woody plants in winter. *One lecture,*

two laboratory hours per week. PREREQUISITES: BIOL 3200 or consent of instructor.

4430. Microbial Physiology and Genetics. (4). Introduction to Prokaryotic Physiology and Genetics. Topics include transformation, transduction, conjugation, plasmids, transposons, metabolic regulation and their relationships to bacterial growth. *Three lecture, two laboratory hours per week.* PREREQUISITE: BIOL 3500 or equivalent.

4440-6440. Pathogenic Microbiology. (4). Survey primarily of pathogenic bacteria, diseases they cause and methods of diagnosis; introduction to immunological principles and immunity. Considerable attention to laboratory methods used for identification of pathogenic bacteria. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3500, with organic chemistry.

4444-6444. Immunology. (4). *In vitro* and *in vivo* reactions of antigens and antibodies, hypersensitivities, blood groups and vaccines. *Two lecture, four laboratory hours per week.* PREREQUISITES: BIOL 3500 and CHEM 3311.

4450-6450. Microbial Ecology. (3). Roles of microorganisms in the environment. Microbial processes, interactions with the environment and biota, population ecology, community ecology, and biodegradation. *Three lecture hours per week.* PREREQUISITE: BIOL 3500, 4511 and 4512, or consent of instructor.

4451-6451. Field Techniques in Microbial Ecology. (3). Intensive field course; philosophy and methods of microbial ecology. Extensive field work on Mississippi River required. One extensive field trip. *One lecture, four laboratory hours per week.* PREREQUISITE OR COREQUISITE: BIOL 4450 and permission of instructor.

4470-6470. Molecular Genetics. (4). Structure, functions and replication of DNA, recombination, colinearity of DNA with genetic map, mutagenesis, gene transfer, plasmids, code, protein synthesis, suppression, regulation of gene expression, and genetic engineering. For students without formal training in molecular genetics. *Four lecture hours per week.* PREREQUISITE: BIOL 3500.

4475-6475. Recombinant DNA Techniques. (4). Laboratory with both theory and application of recombinant DNA techniques. *Eight laboratory hours per week.* PREREQUISITE: Consent of instructor and BIOL 4470-6470 or equivalent.

4501. Virology. (3). Introductory study of viruses and methods of their cultivation, isolation and characterization. *Three lecture hours per week.* PREREQUISITE: BIOL 3500.

4503-6503. Biochemistry Laboratory I. (1). (Same as CHEM 4501-6501). Investigation of physical and chemical properties of compounds of biological interest by common laboratory techniques. Assay of enzymes and enzyme kinetics stressed. *Three laboratory hours per week.* PREREQUISITES: CHEM 3302 OR 3303 AND 3312. PREREQUISITE OR COREQUISITE: BIOL 4511.

4504-6504. Biochemistry Laboratory II. (1). (Same as CHEM 4502-6502). Biochemical laboratory techniques; emphasis of fractionating biological samples and measuring metabolic activity. *Three laboratory hours per week.* PREREQUISITE: BIOL 4511.

4511-6511. Biochemistry I. (3). (Same as CHEM 4511-6511). Chemistry of amino acids and proteins related to their properties in biochemical systems. Enzymology, including kinetics and conformation studies. Coenzymes and their functions. Chemistry of carbohydrates, lipids, and nucleotides. *Three lecture hours per week.* PREREQUISITE: CHEM 3312. COREQUISITE: BIOL 4503 recommended.

4512-6512. Biochemistry II. (3). (Same as CHEM 4512-6512). Metabolism of carbohydrates, amino acids and nucleotides. Biochemistry of DNA and RNA, including their relationship to biosynthesis of proteins. Metabolic control. *Three lecture hours per week.* PREREQUISITE: BIOL 4511.

4560-6560. Microbiology of Foods. (4). Microorganisms in natural and processed foods; origins, nature, and effects on foods; enumeration, and relation to health. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3500 or consent of instructor.

4570. Practicum in Biology. (1-4). Directed extra-departmental studies in special areas of biology. A maximum of four hours credit may be applied toward

degree requirements. PREREQUISITES: major in biology and permission of advisor. (S/U).

- 001 BOTANY
- 002 MICROBIOLOGY
- 003 INVERTEBRATE ZOOLOGY OR ENTOMOLOGY
- 004 VERTEBRATE ZOOLOGY
- 005 TOXICOLOGY

4604-6604. Ethology and Behavioral Ecology. (4). Animal behavior, primarily from ecological and evolutionary perspective. *Two lecture, four laboratory hours per week.* PREREQUISITE BIOL 1112 or equivalent.

4620-6620. Vertebrate Histology. (4). Microscopic study of normal tissues and organs of vertebrate body. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3610 or 3620 or permission of instructor.

4630-6630. General Endocrinology. (3). Anatomy and physiology of the organs of internal secretion; role of hormones in metabolism and development. PREREQUISITE: BIOL 3730.

4640-6640. Ornithology. (4). Biology of birds, with emphasis on avian anatomy, physiology, behavior, and reproductive biology. Field trips emphasize identification of local species and techniques of field study. *Two lecture, four field/laboratory hours per week.* PREREQUISITE: BIOL 1112.

4644-6644. Ichthyology. (4). Collection, preservation, identification, life histories, management, and economic importance of fishes. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 1112.

4651-6651. Field Techniques of Vertebrate Zoology. (4-6). Techniques in field study of vertebrates. Extended field studies outside local area.

4720-6720. Vertebrate Neurology. (4). Nervous system of selected vertebrates. *Three lecture, two laboratory hours per week.* PREREQUISITE: BIOL 1112 or permission of instructor.

4740-6740. Mammalogy. (4). Classification, distribution, life histories, economic importance, techniques of field study, methods of collection and preservation of mammals. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3700.

4744-6744. Herpetology. (4). Classification, distribution, life histories, techniques of collection and preservation, natural habitats of North American reptiles and amphibians. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 3620 or 3700 or permission of instructor.

4770-6770. Mammalian Genetics. (4). Principles of heredity of mammals with primary emphasis on mice and humans. *Three lecture, two laboratory hours per week.* PREREQUISITE: BIOL 3070 or equivalent.

4820-6820. Protozoology. (4). Free living and parasitic protozoa; consideration to structure, function, taxonomy, habitat, and life history. *Two lecture, four laboratory hours per week.*

4840-6840. Invertebrate Zoology. (4). (3840). Invertebrate phyla with emphasis on phylogeny, embryology, and ecology of selected groups. Extended field trip. *Two lecture, four laboratory hours per week.* PREREQUISITE: Permission of instructor.

4930-6930. Insect Physiology. (4). Physiology as applied to life processes of insects. *Two lecture, four laboratory hours per week.* PREREQUISITE: BIOL 1111 or equivalent.

The following courses are taught only at the Gulf Coast Research Lab, Ocean Springs, Mississippi. Memphis State University residence credit is given through affiliation with the laboratory.

4010-6010. Aquaculture. (6). Review of technology, principles, and problems relating to the science of aquaculture with emphasis on culture of marine species. PREREQUISITES: 16 hours of zoology including invertebrate and vertebrate zoology or ichthyology.

4020-6020. Comparative Histology of Marine Organisms. (1-6). Histological organization of representative marine organisms. Fixation, processing, and study of tissues using light microscopy, transmission and scanning electron microscopy. Structural changes and physiological changes during life cycle of organism including histopathology. PREREQUISITE: consent of instructor.

4051-6051. Marine Ecology. (5). Relationship of marine organisms to environment; includes effects of temperature, salinity, light, nutrient concentration,

currents, food, predation and competition on the abundance and distribution of marine organisms. PREREQUISITES: 16 hours of biology including general zoology, general botany, and invertebrate zoology.

4052-6052. Salt Marsh Plant Ecology. (4). Emphasis on botanical aspects of local marshes; includes plant identification, composition, structure, distribution and development of coastal marshes. Biological and physical interrelationships. Primary productivity and relation of marshes to estuaries and associated fauna. PREREQUISITES: general botany, plant taxonomy, plant physiology, and general ecology or consent of instructor.

4200-6200. Marine Botany. (4). Local examples of principal groups of marine algae and maritime flowering plants, treating structure, reproduction, distribution, identification and ecology. PREREQUISITES: ten hours of biology, including introductory botany.

4300-6300. Coastal Vegetation. (3). General and specific aspects of coastal vegetation; emphasis on local examples. PREREQUISITES: 10 hours of biology including general botany.

4500-6500. Marine Microbiology. (5). Role of microorganisms in overall ecology of oceans and estuaries. PREREQUISITES: general microbiology and environmental microbiology or consent of instructor.

4600-6600. Marine Vertebrate Zoology and Ichthyology. (6). Marine Chordata, including lower groups and mammals and birds; emphasis on fishes. PREREQUISITES: sixteen semester hours of zoology including comparative anatomy or consent of instructor.

4610-6610. Early Life History of Marine Fishes. (4). Reproductive strategies and developmental processes of marine fishes. Temporal and spatial distribution patterns, population dynamics, and ecological interactions of fish eggs and larvae. Methods of sampling and identifying eggs and larvae. PREREQUISITES: ichthyology, fisheries biology, ecology, and/or consent of instructor.

4646-6646. Marine Fisheries Management. (4). Overview of practical marine fishery management problems. PREREQUISITE: consent of instructor.

4700-6700. Behavior and Neurobiology of Marine Animals. (4). Behavior, neuroanatomy, and neurophysiology of marine animals with emphasis on neural mechanisms underlying behavior of selected invertebrates, fishes, birds and mammals. PREREQUISITES: 16 hours of zoology and/or psychology or consent of instructor.

4800-6800. Marine Invertebrate Zoology. (6). Important free-living, marine estuarine invertebrates of the Mississippi Sound and adjacent continental shelf of the northeastern Gulf of Mexico; emphasis on structure, classification, phylogenetic relationships, larval development and functional processes. PREREQUISITES: 16 hours of zoology including introductory invertebrate zoology.

4844-6844. Parasites of Marine Animals. (6). Parasites of marine animals; emphasis on morphology, taxonomy, life histories and host-parasite relationships. Lecture, laboratory and field work included. PREREQUISITES: general parasitology or consent of instructor.

4850-6850. Fauna and Faunistic Ecology of Tidal Marshes. (4). Survey and discussion of taxonomy, distribution, trophic relationships, reproductive strategies and adaptation of tidal marsh animals; emphasis on those occurring in northern Gulf marshes. PREREQUISITES: 16 hours of biology and junior standing or consent of instructor.

CHEMISTRY

PROFESSOR

H. GRADEN KIRKSEY, Chair
Room 210, J. M. Smith Hall

The Department of Chemistry offers courses leading to the B.S. degree with a major in chemistry. The department also offers a program culminating in the professional degree of Bachelor of Science in Chemistry. This program is designed to meet the requirements of the Committee on Professional Training of the American Chemical Society, and is undertaken primarily by students who desire to go directly to

positions in chemical industry, or to enroll for postgraduate study in chemistry.

SEQUENCE OF COURSES

Students who present credit for at least two years of high school mathematics (including algebra), or who have an ACT mathematics score of 22 or better, should enroll in CHEM 1121, 1131 if they plan to take more than one year of college chemistry, or plan to major in either a natural science or in civil, mechanical, or electrical engineering. CHEM 1100 is a one-semester course for students of limited preparation in mathematics whose curriculum calls for the CHEM 1121/1131-1122/1132 sequence. CHEM 1101-1102 is a two-semester sequence for students interested in the science of chemistry, but is not credited toward a major in chemistry or physics. It does fulfill the University science requirements of other majors. Credit may not be received for both CHEM 1100 and CHEM 1131 simultaneously. These courses emphasize fundamental principles and concepts, and are designed for non-science majors interested in a study of several areas of physical science.

GENERAL EDUCATION NATURAL SCIENCE REQUIREMENTS

Completion of the following 8-credit hour sequences will satisfy one of the options for the General Education Natural Science requirement: CHEM 1101 (4)/1102(4) OR CHEM 1121(1)/1131(3)/1122(1)/1132(3)

ADVANCED PLACEMENT

Beginning students who have had previous high school training in chemistry are invited to apply for advanced placement.

LABORATORY SAFETY AND COURSE REQUIREMENTS

Laboratory safety is strictly practiced in the Department of Chemistry. Approved eye protection must be worn as required in all chemical laboratories. In addition, to ensure that students enrolled in laboratory courses learn the necessary safety information to safely participate in the laboratory course, all prerequisites and/or corequisites for all laboratory courses are strictly enforced. As a result, when a student enrolls in a laboratory course without prior completion of the necessary prerequisite or corequisite, the student will be dropped from the laboratory course. In addition, when a student simultaneously enrolls in a laboratory course and corequisite course, but subsequently drops or discontinues the corequisite course, the student will be dropped from the laboratory course. In the event any student fails to comply with any safety requirements of the Department of Chemistry, the Department has the right to not allow the student to perform laboratory work, or to withdraw the student from the laboratory course, as appropriate.

E070 CHEMISTRY (CHEM)

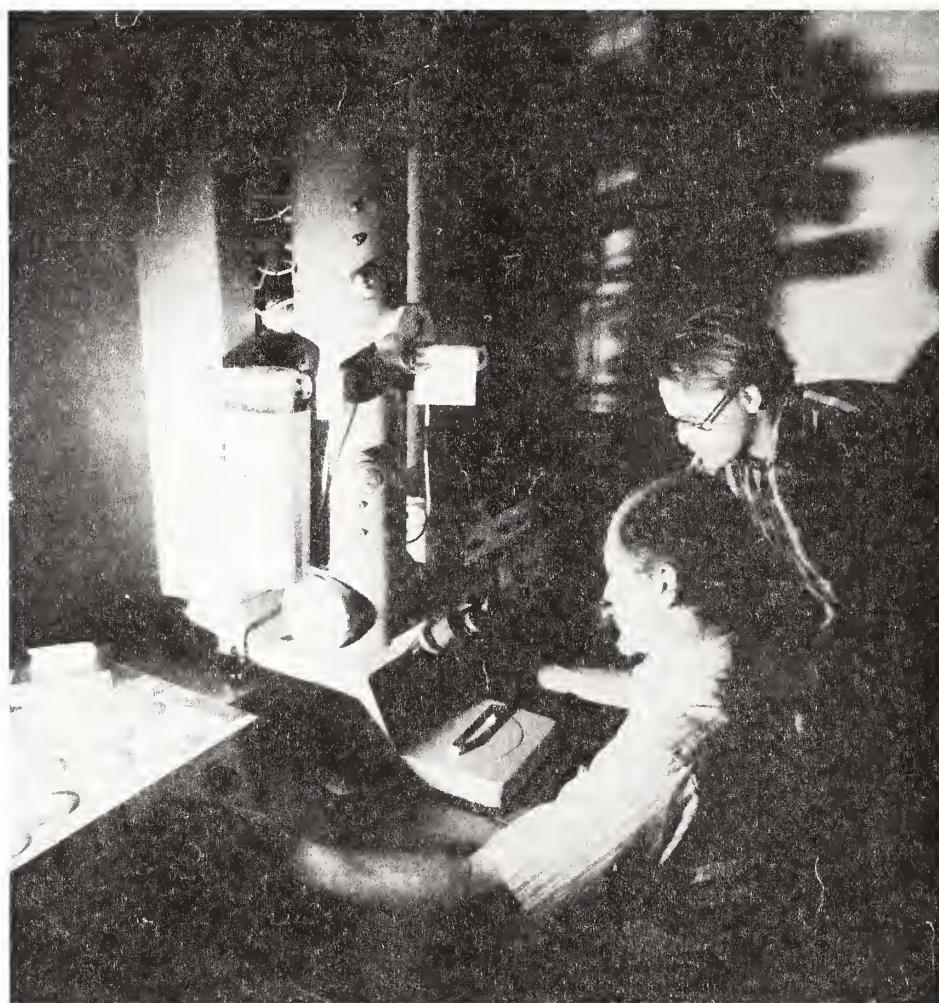
1101. College Chemistry I. (4). (1051). Fundamental laws of chemistry and impact of chemistry on modern society. *Three lecture, two laboratory hours per week. Not credited toward major in chemistry or physics. [G].*

1102. College Chemistry II. (4). (1052). Emphasis on elementary organic and biochemistry. *Three lecture, two laboratory hours per week. Not credited toward major in chemistry or physics. PREREQUISITE: CHEM 1101. [G].*

1100. Introduction to Chemistry. (3). For students whose curriculum requires CHEM 1131, but who feel their background is inadequate. Emphasis on scientific calculations and properties of matter. *Three lecture hours per week. Not credited toward major in chemistry, physics, physical science, or engineering, nor does it satisfy any part of science requirement for any degree. Not applicable toward fulfilling 132 hour minimum for degrees in The College of Arts and Sciences. COREQUISITE: MATH 1211 or 1212 recommended.*

1121. Principles of Chemistry Laboratory. (1). (1111 Lab). Experiments and experimental techniques in general chemistry. *Three laboratory hours per week. PREREQUISITE or COREQUISITE: CHEM 1131. [G].*

1122. Principles of Chemistry Laboratory. (1). (1112 Lab). Continuation of CHEM 1121. *Three*



laboratory hours per week. PREREQUISITE or COREQUISITE: CHEM 1132. [G].

1131. Principles of Chemistry. (3). (1111). For students who are majoring in one of the physical sciences, biology, mathematics or engineering, or who are following a pre-professional program requiring additional chemistry. *Three lecture hours per week. COREQUISITES: MATH 1211, 1212 or 1321; CHEM 1121 recommended. [G].*

1132. Principles of Chemistry. (3). (1112). Continuation of CHEM 1131. *Three lecture hours per week. PREREQUISITE: CHEM 1131. COREQUISITE: 1122 recommended. [G].*

3201. Quantitative Chemical Analysis Laboratory. (2). (3404). Application of the techniques of quantitative analysis in areas described in CHEM 3211. *Six laboratory hours per week. PREREQUISITE OR COREQUISITE: CHEM 3211. [C].*

3211. Quantitative Chemical Analysis. (2). (3400). Theory and practice of modern chemical analysis. Includes: acid-base, redox, and complex ion equilibria, separation methods, absorptiometry, flame spectroscopy, and electroanalytical methods. *Two lecture hours per week. PREREQUISITE: CHEM 1122, 1132. COREQUISITE: CHEM 3201 recommended. [C].*

3301. General Organic Chemistry Laboratory. (1). Emphasis on laboratory techniques as applied to synthesis and class reactions. *Three laboratory hours per week. PREREQUISITE: CHEM 1122, 1132. PREREQUISITE OR COREQUISITE: CHEM 3311.*

3302. General Organic Chemistry Laboratory. (1). Continuation of CHEM 3301; emphasis on correlation of chemical behavior with structure. *Three laboratory hours per week. PREREQUISITES: CHEM 3311 and 3301. COREQUISITE OR PREREQUISITE: CHEM 3312.*

3311. General Organic Chemistry. (3). Systematic study of preparations and properties of organic compounds, including interpretations based on modern theories of organic chemistry. Emphasis on aliphatic

and aromatic hydrocarbons, their halogen derivatives, and alcohols. *Three lecture hours per week. PREREQUISITE: CHEM 1132.*

3312. General Organic Chemistry. (3). Continuation of CHEM 3311; emphasis on more important functional derivatives of aliphatic and aromatic hydrocarbons. *PREREQUISITE: CHEM 3311.*

3401. Elementary Physical Chemistry. (3). Abbreviated course in physical chemistry. Includes elementary thermodynamics, phase transitions, solution chemistry, electrochemistry, kinetics, colloidal and surface chemistry, and molecular polarity. Credit may be obtained either in this course or in 3411, but not both. *Three lecture hours per week. PREREQUISITES: CHEM 3211 or 3311, PHYS 2112 or 2512.*

3402. Physical Chemistry Laboratory. (2). Measurements of physical properties, reaction rates, and equilibria. Application of electrochemistry and calorimetry. *Six laboratory hours per week. PREREQUISITE: CHEM 3411. COREQUISITE OR PREREQUISITE: CHEM 3412.*

3411. Physical Chemistry. (3). Thermochemical foundations of physical chemistry applied to open and closed systems, kinetic theory of gases, and surface chemistry. *Three lecture hours per week. PREREQUISITES: PHYS 2112 or 2512; MATH 2321.*

3412. Physical Chemistry. (3). Continuation of CHEM 3411 emphasizing kinetics of chemical reactions, quantum chemistry, chemical bonding, statistical mechanics, spectroscopy, and other methods of structure determination. *Three lecture hours per week. PREREQUISITE: CHEM 3411.*

3604. Instrumental Methods. (3). Analytical instrumental techniques including molecular spectroscopy, chromatography, atomic spectroscopy, and electrochemical analysis. *One lecture, six laboratory hours per week. PREREQUISITES: CHEM 3201, 3211, 3311, or permission of instructor.*

4001. Environmental Chemistry. (3). Chemical phenomena occurring in soil, atmospheric and aquatic environments; consideration of natural resources and energy. *Three lecture hours per week.* PREREQUISITE: CHEM 3311.

4101-6101. Inorganic Chemistry Laboratory. (1). Experimental techniques of inorganic synthesis and physical methods for characterization of inorganic and organometallic compounds. *Three laboratory hours per week.* PREREQUISITE or COREQUISITE: CHEM 4111-6111.

4111-6111. Inorganic Chemistry. (3). (4210). Theoretical and applied inorganic chemistry. Stress on relationship of structure and bonding to properties of elements and compounds. Includes introductory molecular orbital theory, coordination compounds and organometallics, ligand field theory, nonaqueous solvent systems, and reaction mechanisms. *Three lecture hours per week.* PREREQUISITE: CHEM 3412 or permission of the instructor. COREQUISITE: CHEM 4101 recommended.

4180-99. Special Topics in Inorganic Chemistry. (1-3). Topics in inorganic chemistry which are of current interest. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3312 and permission of instructor.

4220-6220. Advanced Instrumental Analysis. (4). Advanced topics in electrochemical, spectroscopic, and chromatographic methods, and an introduction to electronic and optical principles of chemical instrumentation. *Two lecture, six laboratory hours per week.* PREREQUISITE: CHEM 3412.

4280-99. Special Topics in Analytical Chemistry. (1-3). Topics of current interest in analytical chemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3412 and permission of instructor.

4380-99. Special Topics in Organic Chemistry. (1-3). Topics of current interest in organic chemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3312 and permission of instructor.

4480-99. Special Topics in Physical Chemistry. (1-3). Topics of current interest in physical chemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 3412 and permission of instructor.

4501-6501. Biochemistry Laboratory I. (1). (Same as BIOL 4504-6503). Investigation of physical and chemical properties of compounds of biological interest by common laboratory techniques. Assay of enzymes and enzyme kinetics stressed. *Three laboratory hours per week.* PREREQUISITES: CHEM 3302 or 3303 and 3312. PREREQUISITE OR COREQUISITE: CHEM 4511.

4502-6502. Biochemistry Laboratory II. (1). (Same as BIOL 4504-6504). Biochemical laboratory techniques; emphasis on fractionating biological samples and measuring metabolic activity. *Three laboratory hours per week.* PREREQUISITE: CHEM 4511.

4511-6511. Biochemistry I. (3). (Same as BIOL 4511-6511). Chemistry of amino acids and proteins related to their properties in biochemical systems. Enzymology, including kinetics and conformation studies. Coenzymes and their functions. Chemistry of carbohydrates, lipids, and nucleotides. *Three lecture hours per week.* PREREQUISITE: CHEM 3312. COREQUISITE: CHEM 4501 recommended.

4512-6512. Biochemistry II. (3). (Same as BIOL 4512-6512). Continuation of CHEM 4511. Metabolism of carbohydrates, amino acids and nucleotides. Biochemistry of DNA and RNA, including their relationship to biosynthesis of proteins. Metabolic control. *Three lecture hours per week.* PREREQUISITE: CHEM 4511.

4580-99. Special Topics in Biochemistry. (1-3). Topics of current interest in biochemistry. Topics are varied and announced in *Schedule of Classes.* PREREQUISITE: CHEM 4512 and permission of instructor.

4601-6601. Chemical Demonstrations. (3). Preparing and presenting demonstrations and activities to illustrate chemical principles, processes, and properties for secondary and post-secondary classes. *One lecture/four laboratory hours per week.* PREREQUISITE: CHEM 3302, CHEM 3312 or permission of instructor.

4911-6911. Chemical Literature and Seminar. (1). Use of chemical literature, writing of technical reports, and oral presentation of investigative reports. *One lecture hour per week.* PREREQUISITE: permission of instructor.

4991. Chemical Research. (1). (See description under CHEM 4993.)

4992. Chemical Research. (2). (See description under CHEM 4993.)

4993. Chemical Research. (3). Introduction to basic research. Student collaborates with a faculty sponsor on problem of mutual interest selected from fields of analytical, inorganic, organic, and physical chemistry, and biochemistry. Experience in effective laboratory techniques, critical experiment design, and preparing a formal scientific paper. To receive credit toward a major in chemistry, student must complete three semester hours in these research courses. *Three to nine laboratory hours per week.* PREREQUISITE: CHEM 3312 and permission of instructor. Students expected to complete prospectus in consultation with a faculty sponsor before registering for this course. [W].

PHYSICAL SCIENCE (PSCI)

1031. Physical Science. (3). Introductory course; emphasis on fundamental principles and concepts of physical science. *Two lecture, two laboratory hours per week.*

1032. Physical Science. (3). Continuation of PSCI 1031. *Two lecture, two laboratory hours per week.* PREREQUISITE: PSCI 1031.

CRIMINOLOGY AND CRIMINAL JUSTICE

ASSOCIATE PROFESSOR
JERRY R. SPARGER, Chair
Room 405, Mitchell Hall

E075 CRIMINOLOGY AND CRIMINAL JUSTICE (CJUS)

1100. Introduction to Criminal Justice. (3). Introduction to American criminal justice system in its three dimensions: police, courts, and corrections, tracing its development from ancient and early English beginnings to present time. [G].

2110. Comparative Justice Systems. (3). Overview of justice systems of various countries, focusing primarily on substantive and philosophical relationships between the subsystems and the society they serve. [G].

2520. Street Law: A Course in Practical Law. (3). Practical application of law to everyday problems. Legal processes and resources available to every citizen; case materials in criminal, consumer, environmental, and family law with reference to their relationship in criminal justice context.

3128. Research Methods in Criminal Justice. (3). Techniques commonly utilized in criminal justice research; emphasis on research design, methods of data collection, measurement of variables, and threats to validity and reliability; introduction to micro-computers.

3129. Statistical Methods in Criminal Justice. (3). Statistical methods commonly utilized in criminal justice research; emphasis on descriptive and inferential statistics, measures of significance, and interpretation of results; use of micro-computers and statistical programs for data collection and analysis. PREREQUISITE: 3128 or permission of instructor. [C].

3152. Drug Addiction and Alcoholism. (3). Cultural and medical aspects of use of alcohol and various other drugs; consideration of roles of law enforcement and corrections in these areas.

3226. Police in America. (3). (3526). Comparative analysis of problems, procedures, organization, and functions of effective police organization.

3326. Courts in America. (3). Court operations including assignments and specialization of judges, document preparation and calendaring of cases; consideration of problems involving court personnel, funds and other property in court's custody and maintaining record of prisoners awaiting trial in criminal cases.

3426. Corrections in America. (3). Concepts of organizational behavior applied to probation, parole, community-based corrections, prisons, and other detention facilities, with emphasis on their history and practice.

3510. Law and Society. (3). Law as system of control and as mechanism for resolution of conflict. Relationship of law to political, economic and social systems critically analyzed and development of legal profession studied.

3521. Constitutional Criminal Procedure. (3). General application of U.S. constitution principles to investigative and prosecutorial process of the criminal justice system; emphasis on requirements of the 4th, 5th, 6th, 8th, and 14th Amendments as they relate to arrest, search, and seizure, interrogation and identification procedures, trial and appellate proceedings.

3541. Crime and Criminology. (3). Milieu of crime and factors influencing criminality. Major emphasis: causes of individual and group criminality and ability of criminal justice system to control crime.

3542. Crime and Criminal Typologies. (3). (4210). Classification of crime and typical elements involved in each type of crime; classification of criminal offenders and salient career variables associated with each type of offender relative to background, crime, and career prognosis.

4010-19. Special Topics in Criminal Justice. (1-3). Topics are varied and announced in *Schedule of Classes.*

4100. Individual Directed Study in Criminal Justice. (1-4). Individual directed reading and research in special areas of interest in field of criminal justice. PREREQUISITE: permission of director.

4110. Senior Seminar in Criminal Justice. (3). Analysis of criminal justice issues from a systems perspective; emphasis on active learning, gaining familiarity with criminal justice resources, and development of analytical and writing skills. PREREQUISITE: Senior standing and permission of department chairman.

4126. Criminal Justice Administration and Management. (3). (3126) Management philosophies for administration of criminal justice agencies; focus on organizational behavior, theories of management, planning and budgeting, administrative/legal issues, and administrative problems unique to the criminal justice system.

4130. Ethical Dilemmas in Criminal Justice. (3). Legal, moral, and social implications of ethical dilemmas in criminal justice, including police use of deadly force, police discretion, victimless crimes, surveillance, enforcement of unpopular laws, use of informers, plea bargaining, judicial discretion, and capital punishment. Subcultural norms and dilemmas they present to criminal justice practitioner.

4150. Internship in Criminal Justice. (1-3). Experience in actual criminal justice setting; internship initiated by department in agency, and both department and agency supervise and direct student program. May be repeated for maximum of 6 hours. PREREQUISITE: senior standing and/or approval of instructor.

4160-6160. Forensic Sciences. (3). Forensic specialities in terms of their history, scientific rationale upon which each is based, and problems that may compromise accuracy or validity; introduction to field techniques and analysis of evidence.

4170. Prevention and Deterrence of Crime. (3). Theoretical and practical strategies for crime prevention and deterrence. Social, environmental, and mechanical developments. Police, courts, and correctional elements of criminal justice system analyzed in terms of current effectiveness and future potential for crime suppression.

4180-6180. Corporate and White-Collar Crime. (3). Organizational and occupational crime compared to other types of criminality. Emphasis on causes, frequency, control, and social impact.

4190-6190. Terrorism: Social and Legal Perspective. (3). Theoretical and ideological aspects of practice of and response to international and domestic terrorism. Terrorism as crime from political, social, economic, historical, and legal perspectives.

4233. Organized Crime. (3). Nature, structure, characteristics, and investigation of syndicated crime; its impact on social and economic conditions in this country.

4235. Private and Industrial Security. (3). Role and function of private police organizations and legal restrictions on private security personnel. Facets of

private security to include retail, industrial and corporate security.

4520-6520. Substantive Criminal Law. (3). (3520). Substance of the crime, including common-law sources and basic principles, types of offenses, responsibility, justification and excuse, and related areas.

4530. Principles of Evidence and Proof. (3). Rules of evidence and matters of proof affecting criminal investigation in investigatory and prosecutive stages of criminal justice. Socio-legal aspect of basic rules of evidence, including hearsay rules, impeachment, materiality and relevancy, privilege, eyewitness identification.

4531-6531. Issues in Constitutional Rights. (3). Issues in constitutional law related to criminal defendants and incarcerated; exclusionary rule and its alternatives, application of 1st Amendment to criminal law, legal status of confined persons (discipline, legal services, communications, medical aid), and liability of correctional and police officials. Civil and criminal legal techniques for protecting and vindicating constitutional rights, such as *habeas corpus* and 42 USC 1983.

4533-6533. Juvenile Delinquency: Theory and Process. (3). Theories of juvenile delinquency, gang activities, and status offenses. History, organization, programs and procedures of agencies charged with control and prevention of juvenile delinquency including police, juvenile units, juvenile court, and juvenile correctional agencies.

ENGLISH

PROFESSOR

WILLIAM H. O'DONNELL, Chair
Room 467, Patterson Hall

All candidates for graduation at Memphis State University are required to complete ENGL 1101 and 1102 or their equivalents, with a grade of C or better. Before enrolling in ENGL 1101, a student must have either: (1) an ACT English score of 19 or above, or (2) an SAT verbal score of 450 or above, (3) a satisfactory score on the English Placement Essay administered by the Testing Center, or (4) completion of R&DS 0810 with a grade of C or better. Students admitted to the University through the Developmental Studies program must meet one of the following conditions before enrolling in ENGL 1101: (1) completion of R&DS 0810 with a grade of C or better, or (2) a satisfactory score on the English Placement portion of the AAPP Complete test administered by the Testing Center.

After completing ENGL 1101 and 1102 with a grade of C or better, all students must take 2201. Freshman and sophomore sequence must be scheduled until completed. ENGL 1101 and 1102 must be taken in sequence; no credit will be allowed for ENGL 1102 until 1101 has been completed with a grade of C or better.

E080 ENGLISH (ENGL)

0101. English as a Second Language. (1). Introduction to English Composition, concentration on composition skills; emphasis on sentence structure in written discourse. Open to non-native speakers of English only. Admission by placement only.

0102. English as a Second Language. (1-2). Intermediate Composition. Practice in process of writing English expository prose, specifically paragraphs and short essays; review of grammar and sentence structure needed for academic writing skills. Open to non-native speakers of English only. Admission by placement only.

0103. English as a Second Language. (1-3). Advanced Composition; practice in expository writing of paragraphs and essays with emphasis on the writing process; extensive reading in fiction used to encourage writing skill acquisition. Open to non-native speakers of English only. Admission by placement only.

NOTE: The accumulation of three credit hours from the above courses and successful completion of 0103 will be considered the equivalent of ENGL 1101. Not more than 3 hours credit may be accumulated in 0101, 0102, 0103.

1101. English Composition. (3). Practice in expository writing with emphasis on content, organization, and style (levels of usage and sentence structure) for

different purposes and audiences. PREREQUISITE: R&DS 0810 with grade of C or better, or ACT English score of 19 or above, or SAT verbal score of 450 or above, or satisfactory completion of placement essay. [G].

1102. English Composition and Analysis. (3). Practice in expository writing which synthesizes ideas from various readings, including library work and on documented papers. PREREQUISITE: ENGL 1101 with a grade of C or better, or equivalent. [G].

2101. English Literature. (3). Selected readings in English literature from beginning through eighteenth century; attention to development of literary forms and to cultural context. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent.

2102. English Literature. (3). Selected readings in English literature from Romantic period to present; attention to development of literary forms and to cultural context. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent.

2103. Modern European Fiction. (3). Selected readings in British and Continental fiction of nineteenth and twentieth centuries; attention to development of fictional forms and to making of modern European intellectual and literary tradition. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent.

2104. Poetry and Drama. (3). Selected readings of poems and plays; attention to development of genres. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent.

2105. American Fiction. (3). Selected readings in American fiction of nineteenth and twentieth centuries; consideration of characteristic themes and techniques of both American novel and American short story. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent.

2106. Contemporary Literature. (3). Selected readings in poetry, drama, and fiction of America, Britain, and Europe, written since World War II; attention to development of literary modes and to cultural context. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: ENGL 1101 and 1102, with a grade of C or better, or their equivalent.

2201. Literary Heritage. (3). Major texts of literary heritage; modes of literary expression and cultural context; emphasis on works as products of their historical contexts and as processes shaping human consciousness. Composition and critical thinking beyond levels expected of freshmen. PREREQUISITES: English 1101 and 1102, with a grade of C or better, or their equivalent. [G].

NOTE: Students may not enroll for an upper-division English course until they have completed satisfactorily ENGL 1101, 1102, and 2201, or their equivalents.

3100-09. Special Topics in English. (1-3). Topics are varied and announced in *Schedule of Classes*.

3211. British Literature of the Medieval Period. (3).

3212. British Literature of the Sixteenth Century. (3).

3213. British Literature of the Seventeenth Century. (3).

3214. British Literature of the Restoration and Eighteenth Century. (3).

3221. British Literature of the Romantic Period. (3).

3222. British Literature of the Victorian Period. (3).

3224. British Literature of the Twentieth Century. (3).

3321. American Literature Before 1860. (3).

3322. American Literature from 1860 to World War I. (3).

3323. American Literature from World War I to Present. (3).

3500. Practical English Grammar. (3). Extended study of the fundamentals of English grammar, sentence structure, usage, diction, punctuation, and spelling. May not apply to the English major or minor.

3501. Modern English Grammar. (3). Introduction to current grammatical theory, especially transformational, generative approach. Description of sounds, word

structures, syntax, and semantics of English. Neither a review of grammar nor a remedial course.

3511. Introduction to Linguistics. (3). Introduction to the nature and functions of human language, to its structural principles, and to its place in culture and society. Emphasis on language diversity and change through history and contact. Discussion of language and thought, origin of language, and other topics.

3521. The American Language. (3). History and development of American English, especially its vocabulary. Development of American grammatical tradition and of American dictionaries. Usage controversies and issues in American English.

3601. Technical and Professional Writing. (3). Introduction to rhetoric and style of documents written by scientists, engineers, technical writers, and other professionals. Extensive practice in writing reports, proposals, manuals, and correspondence.

3602. Professional Editing. (3). Procedures for editing and preparing professional and technical documents, including introduction to mechanical editing, stylistic and substantive editing, integration of visual and verbal texts, and preparation of texts for publication. Basic skills of business writing.

3603. Engineering Communications. (3). Form and contexts of written and oral communications in engineering professions. Extensive practice in oral reporting, written reports, manuals, and proposals.

3604. Persuasive Writing. (3). (2602). Study and practice of writing essays and reports with emphasis on persuasion. Introduction to empirical and library research, application of rhetorical principles, and nature of evidence. Academic and professional writing, editing, and revision. [C].

3605. Introduction to Creative Writing. (3). (2601). Introduction to the writing of fiction and poetry.

3701. Introduction to Literary Criticism. (3).

4001. Senior Honors Seminar I. (3). Intensive study of a problem in language or literature. Enrollment limited to English honors students.

4002. Senior Honors Seminar II. (3). Intensive study of a problem in language or literature. Enrollment limited to English honors students.

4100-09-6100-09. Special Topics in English. (3). Topics are varied and announced in *Schedule of Classes*.

4231-6231. Chaucer. (3).

4232. Shakespeare's Tragedies. (3).

4233. Shakespeare's Comedies and Histories. (3).

4234-6234. Milton. (3).

4241-6241. British Novel Through Austen. (3).

4242-6242. British Novel Since Scott. (3).

4251-6251. British Drama To 1642. (3).

4252-6252. British Drama Since 1660. (3).

4321-6321. American Literature: Major Writers Before 1860. (3).

4322-6322. American Literature: Major Writers Since 1860. (3).

4323. Southern Literature. (3).

4341. American Novel to 1900. (3). (3341).

4342. American Novel Since 1900. (3). (3342).

4371. African American Literature. (3).

4411-6411. European Literature to Renaissance. (3).

4412-6412. European Literature Since Renaissance. (3).

4423. Modern British and American Poetry. (3).

4424. Modern British and American Fiction. (3).

4441-6441. European Fiction. (3). (3441). Movements and writers important to development of Continental fiction from late 18th century to present.

4451-6451. Studies in Women and Literature. (3). Literature and criticism by and about women.

4461. The Bible as Literature. (3).

4501. History of the English Language. (3).

4511. Language and Literature. (3). How linguistics can illuminate the analysis of literature, the nature of literary language, and the linguistic options open to a writer.

4521. Language and Society. (3). Place of language in society and how it creates and reflects social relationships. Geographical and social dialects, male/female differences, and language of various subgroups within our culture. Intensive examination of implications of language differences.

4530. Practicum in ESL. (3-6). Experience in observing and teaching, peer teaching, and work with an ESL specialist. Repeatable to a maximum of six hours.

4531. Methods and Techniques in ESL. (3). Methods and techniques of teaching English as a Second Language in various settings.

4532. Skills Approaches and Assessment for ESL. (3). Approaches to evaluation and means of assessment of language skills, with special emphasis on English as a Second Language. [C].

4601. Poetry Workshop. (3). The nature of poetry, critical approaches to the poem, and practical experience in writing and revising text. Repeatable to maximum of 6 hours with permission of instructor.

4602. Advanced Composition (3). Principles involved in writing clear expository prose. Emphasis on application of these principles; analysis of readings and of student's writing.

4603. Fiction Workshop. (3). Nature of short story and longer forms of fiction, critical approaches to fiction, and practical experience in writing and revising text. Repeatable to maximum of 6 hours with permission of instructor.

4604-6604. Forms of Poetry. (3). A study of metrics, forms, and types of poetry in English with attention to the principal traditions and critical ideas associated with the writing of verse in English.

4605-6605. Forms of Fiction. (3). A study of how fiction works through analyzing the short story, the novella, and the novel with attention to technical developments.

4606-15. Topics in Advanced Technical Writing. (3). Theories, contexts, and practices of writing in the world of technology. Topics vary. Extensive practice in writing, editing, and preparing technical publications.

4900. Independent Study. (1-3). A selected topic or problem in the field of literature, language, or writing. PREREQUISITE: permission of instructor.

4996. Honors Thesis. (1-3).

English translation from origins to close of Silver Age. Emphasis on genres of Roman literature.

4780. Individual Studies in Classics. (1-3). Directed individual study in selected areas of Classics chosen in consultation with instructor. Repeatable for a maximum of six semester hours credit by permission of chairman. PREREQUISITE: Permission of instructor.

4791. Special Studies in Classics. (1-3). Topics in classical literature and civilization. May be repeated for maximum of six hours credit. PREREQUISITE: Permission of chair and instructor.

E140 GREEK (GREK)

1101. Elementary Greek I. (3). Elements of grammar and syntax of classical and koine Greek; practice in reading and translation.

1102. Elementary Greek II. (3). Continuation of grammar and syntax of classical and koine Greek; practice in reading and translation of both classical and New Testament Greek. PREREQUISITE: GREK 1101 or equivalent.

2201. Intermediate Greek I. (3). Comprehensive review of Greek grammar; practice in reading and translation of both classical and New Testament Greek. PREREQUISITE: GREK 1102 or equivalent.

2202. Intermediate Greek II. (3). Readings in unaltered classical and New Testament Greek. Emphasis on interpretive techniques used in reading primary texts. PREREQUISITE: GREK 2201 or equivalent.

3111. Greek Historians. (3). Reading and analysis of selections from writings of Herodotus, Thucydides, and later Greek historians.

3511. Greek Tragedy. (3). Reading and analysis of selected tragedies of Aeschylus, Sophocles, and Euripides.

3911. Plato's *Apology*, *Crito*. (3). Reading and analysis of dialogues of Plato which give a prelude to death of Socrates.

4441. Homer. (3). Reading and analysis of selections from Homer's *Iliad* and *Odyssey*.

E170 LATIN (LATN)

1101. Elementary Latin. (3). Elements of grammar; practice in Latin composition and translation. Students presenting Latin to meet university admission requirements cannot receive credit for LATN 1101. Credit cannot be received for both 1101 and 1199.

1102. Elementary Latin. (3). Completion of elementary Latin grammar, with additional readings. PREREQUISITE: LATN 1101 or equivalent college-level credit. Credit cannot be received for both LATN 1102 and 1199.

1199. Review of Basic Latin. (3). Grammar and review for those who have already studied Latin in high school. Preparation for LATN 2201. Credit cannot be received for both LATN 1102 and 1199 nor for 1101 and 1199.

2201. Intermediate Latin. (3). Review of basic Latin grammar with reading selections from *The Golden Fleece* and Roman history. PREREQUISITE: LATN 1102 or 1199 or the equivalent.

2202. Intermediate Latin. (3). More advanced readings from major authors. PREREQUISITE: LATN 2201 or equivalent.

3111. Roman Historians. (3). Readings and analysis of selections from Caesar, Livy, Tacitus, and Suetonius; emphasis on nature of Roman historiography.

3211. Vergil. (3). Reading and analysis of the *Aeneid*.

3912. Cicero. (3). Reading and analysis of *De Amicitia* and *De Senectute*.

4411. Roman Letter Writers. (3). Reading and analysis of Cicero's Letters.

4711. Elegy, Lyric, and Epigram. (3). Reading and analysis of selections from Catullus, Horace, Tibellus, Propertius, and Martial.

E211 LANGUAGES AND LITERATURE (LALI)

NOTE: LALI literature courses may not be used to satisfy any part of the foreign language requirement, nor do they apply toward a major or minor in any of the foreign languages.

1701-1702. Special Studies in Foreign Languages. (3, 3). (LANG). Freshman-level instruction in languages not regularly offered by Department of Foreign Languages; offered if and when sufficient demand exists and instructors available. Although credit earned in

these courses may be used to satisfy foreign language requirements for degrees, students should be aware of two important points: (1) foreign language requirement for degrees in College of Arts and Sciences specifies that all twelve semester hours (or six for some professional degrees) must be in same language; (2) unless demand is sufficient and unless teachers are available, the university cannot offer enough courses to enable student to meet these requirements.

2701-2702. Special Studies in Foreign Languages. (3, 3). (LANG). Continuation of Language 1701-1702. Offered provided instructor is available and there is sufficient student enrollment.

4010-19-6010-19. Special Topics in Foreign Literatures. (3). Topics vary and are announced in Schedule of Classes.

4491. The Faust Theme in Western Literature. (3). (GERM 4491). Faust figure in narrative, lyric, and drama from 16th to 20th century; major emphasis on Goethe's Faust; musical treatment of Faust motif; presented in English translation.

4492. Contemporary Latin American Literature. (3). (SPAN 4492). Survey of 20th century literary developments in Latin America and Hispanic Caribbean; emphasis on widely translated, international prize-winning authors; presented in English translation.

4493. Contemporary French Literature. (3). (FREN 4493). Emphasis on widely translated, well-known works by major French writers; presented in English translation.

4780. Individual Studies in Language and Literature. (1-3). Directed individual study in selected areas of language or literature chosen in consultation with instructor. Repeatable for a maximum of six semester hours credit by permission of instructor. PREREQUISITE: Permission of instructor.

E120 FRENCH (FREN)

0701-5701. French for Reading Knowledge I. (3). Introduction to reading French. Intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language. Emphasis on vocabulary building and on determining the meaning of words not previously encountered. Reading of texts in French at sight or after preparation. No previous knowledge of French required. Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.

0702-5702. French for Reading Knowledge II. (3). Further work in recognizing and interpreting grammatical structures. Reading of specialized scholarly texts. Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.

1101. Elementary French. (3). Elements of grammar and pronunciation; reading of simple selections. Students presenting French to meet university admission requirements cannot receive credit for FREN 1101. Credit cannot be received for both 1101 and 1199.

1102. Elementary French. (3). Reading selections of increasing difficulty. PREREQUISITE: FREN 1101 or equivalent college-level credit. Credit cannot be received for both FREN 1102 and 1199.

1199. Review of Basic French. (3). Grammar and review for those who have already studied French in high school. Preparation for FREN 2201. Credit cannot be received for both FREN 1102 and 1199 nor for 1101 and 1199.

2201. Intermediate French. (3). Comprehensive review of French grammar, exercises in writing, and readings in French literature and culture. PREREQUISITE: FREN 1102 or 1199, or equivalent.

2202. Intermediate French. (3). More advanced readings. PREREQUISITE: FREN 2201 or equivalent.

3301. Conversation and Composition. (3). PREREQUISITE: FREN 2202 or equivalent.

3302. Conversation and Composition. (3). PREREQUISITE: FREN 3301 or permission of instructor.

3401. French Civilization. (3). Culture of France as reflected in its history, social institutions, art, and music. Recommended for Foreign Language, liberal arts, and International Business majors. PREREQUISITE RECOMMENDED: FREN 3301.

3411. Introduction to French Literature. (3). Selections from origins to present time. Emphasis on textual analysis. PREREQUISITE: FREN 3301.

3791. French for Practical Affairs. (3). Introduction to French business terminology and forms of correspondence with regular readings of business, commercial and technical publications. PREREQUISITE: FREN 3301 recommended.

FOREIGN LANGUAGES AND LITERATURES

ASSOCIATE PROFESSOR

NICHOLAS W. ROKAS, *Interim Chair*
Room 375A, Dunn Mathematics
Foreign Languages Building

Beginning in the Fall of 1990, all students who have not successfully completed first year language courses at an accredited institution of higher education and who wish to enroll in 2201 (French, German, Italian, Latin, Spanish) will be required to take the placement test given by the Department of Foreign Languages and Literatures. Those students who do not achieve the score required to be placed in 2201 must take 1199 which is a preparatory course for 2201 and carries a credit of three semester hours. Students whose score is too low for placement in 1199 will be placed in 1101. The 1101-1102 sequence will be reserved for those students who have had no previous training in the chosen language.

For information about the dates and place of placement tests, contact the Department of Foreign Languages and Literatures (678-2506).

E110 CLASSICS (CLAS)

2481. Mythology. (3). Thematic study of classical myths and their function in ancient literature. Emphasis on reading myths in ancient sources in translation. [G].

3021. Scientific Terminology. (3). Origin and derivation of words used in medicine and the sciences; emphasis on building of scientific vocabulary.

3412. Roman Culture. (3). Study based on literary sources, of public and private life, including such topics as family life, slavery, religion, medicine, law, and technology.

3413. Greek Literature in Translation. (3). Reading and analysis of masterpieces of Greek literature in translation from Homer to Lucian. Emphasis on development of literary types.

3414. Roman Literature in Translation. (3). Reading and analysis of masterpieces of Roman literature in

3792. French for Practical Affairs. (3). Continuation of French 3791. PREREQUISITE: FREN 3791 or equivalent.

4301-6301. French Phonetics. (3). Theory and practice of French sounds; especially recommended for teachers of French. PREREQUISITE: three years of college French or permission of instructor.

4302. Advanced Grammar. (3). Practical advanced grammar course concerned with grammatical, syntactical, and lexical usage of contemporary French.

4412. Seventeenth and Eighteenth Centuries. (3). Classical theatre and critical theories; essay, *nouvelle*, and *conte* in 18th century. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.

4413. Nineteenth Century French Literature. (3). Survey of literary movements and major authors with readings in all major genres. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.

4414. Twentieth Century French Literature. (3). Survey of literary movements and major authors with readings in the novel, poetry, and theater. PREREQUISITE: FREN 3301. RECOMMENDED: FREN 3411.

4780. Individual Studies in French. (1-3). Directed individual study in selected areas of French chosen in consultation with instructor. PREREQUISITE: Permission of instructor.

4791-99. Special Topics in French Literature, Language, or Civilization. (3). May be repeated for maximum of 6 hours credit. PREREQUISITE: Permission of chair and instructor.

E130 GERMAN (GERM)

0701-5701. German for Reading Knowledge I. (3). Introduction to reading of German. Intensive drill in recognizing and interpreting grammatical structures, especially those peculiar to scholarly written language. Emphasis on vocabulary building and on determining meaning of words not previously encountered. Reading of texts in German at sight or after preparation. No previous knowledge of German required. *Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.*

0702-5702. German for Reading Knowledge II. (3). Further work in recognizing and interpreting grammatical structures. Reading of specialized scholarly texts. *Does not fulfill any part of undergraduate language requirement and cannot be applied toward major.*

1101. Elementary German. (3). Elements of grammar and pronunciation; reading of simple selections, simple conversations. *Students presenting German to meet university admission requirements cannot receive credit for GERM 1101. Credit cannot be received for both 1101 and 1199.*

1102. Elementary German. (3). Continuation of basic grammar and pronunciation. Reading selections and conversations of increasing difficulty. PREREQUISITE: GERM 1101 or equivalent college-level credit. *Credit cannot be received for both GERM 1102 and 1199.*

1199. Review of Basic German. (3). Grammar and review for those who have already studied German in high school. Preparation for GERM 2201. *Credit cannot be received for both GERM 1102 and 1199 nor for 1101 and 1199.*

2201. Intermediate German. (3). Comprehensive review of German grammar, exercises in writing, and readings in German literature and culture. PREREQUISITE: GERM 1102 or 1199, or equivalent.

2202. Intermediate German. (3). More advanced readings in German literature and culture. PREREQUISITE: GERM 2201 or equivalent.

2203. Scientific German. (3). A continuation of 2201, with readings in science areas. PREREQUISITE: GERM 2201 or equivalent.

3301. Conversation and Composition. (3). PREREQUISITE: GERM 2202 or equivalent.

3302. Conversation and Composition. (3). PREREQUISITE: GERM 2202 or equivalent.

3411. Introduction to German Literature and Culture I. (3). From beginnings to late eighteenth century. PREREQUISITE: GERM 2202 or equivalent.

3412. Introduction to German Literature and Culture II. (3). From late eighteenth century to modern period. PREREQUISITE: GERM 2202 or equivalent.

3791. German for Commerce I. (3). German business terminology and forms of correspondence; regular readings of business, commercial and technical

publications. PREREQUISITE: GERM 2202 or equivalent.

3792. German for Commerce II. (3). German business terminology and correspondence. Reading of business, technical, commercial publications.

4443-6443. Major German Writers of the Twentieth Century. (3). Selected works of Hesse, Thomas Mann, Kafka, Frisch, Duerrenmatt, Brecht, and Boell. PREREQUISITE: Two courses from the group GERM 3301, 3302, 3411, 3412; or permission of instructor.

4451. The German Drama. (3). Survey of dramatic literature from sixteenth to twentieth centuries; readings from Reformation, Baroque, Enlightenment, *Sturm und Drang*, Classicism, Romanticism, Realism, and modern period. PREREQUISITES: Two courses from the group GERM 3301, 3411, 3412; or permission of instructor.

4465. German Narrative Prose. (3). Reading of major prose writings from Romanticism to present. Emphasis on the *Novelle*. PREREQUISITES: One course from the group GERM 3301, 3302, 3410, 3411, 3412; or permission of instructor.

4501. Applied German Linguistics. (3). Application of modern linguistic theories to learning German. PREREQUISITES: Two courses from the group GERM 3301, 3411, 3412; or permission of instructor.

4511. The German Language: Development and Structure. (3). German language in its various stages of development. PREREQUISITE: GERM 3301 or 3302; or permission of instructor.

4780. Individual Studies in German. (1-3). Directed individual study in selected areas of German chosen in consultation with instructor. Repeatable for a maximum of six semester hours credit by permission of chairman. PREREQUISITE: Permission of instructor.

4791-99. Special Topics in German Language or Literature. (3). May be repeated for maximum of 6 hours credit. PREREQUISITE: Permission of chair and instructor.

E160 ITALIAN (ITAL)

1101. Elementary Italian. (3). Elements of grammar and pronunciation; reading of simple selections.

1102. Elementary Italian. (3). Selections of increasing difficulty. PREREQUISITE: ITAL 1101 or equivalent.

E165 JAPANESE (JAPN)

1101. Elementary Japanese I. (3). (LALI 1702005). Principles of pronunciation; everyday expressions; basic sentence patterns through oral practice; writing and reading using the Roman alphabet.

1102. Elementary Japanese II. (3). (LALI 1702005). Continued study of sentence patterns through oral and (Romanized) written practice; the *katakana* and *hiragana* syllabaries.

2201. Intermediate Japanese I. (3). Continued study of sentence patterns through oral and written practice; introduction to the Japanese writing system, with approximately 250 *kanji* and their compounds in readings and written practice.

2202. Intermediate Japanese II. (3). Continued study of sentence patterns; conversation; additional *kanji* to a total of approximately 500; readings.

E190 RUSSIAN (RUSS)

1101. Elementary Russian. (3). Elements of grammar and pronunciation; reading of simple selections.

1102. Elementary Russian. (3). Selections of increasing difficulty. PREREQUISITE: RUSS 1101 or equivalent.

2201. Intermediate Russian. (3). Comprehensive review of Russian grammar, exercises in writing, and readings in Russian literature and culture. PREREQUISITE: RUSS 1102 or equivalent.

2202. Intermediate Russian. (3). More advanced readings. PREREQUISITE: RUSS 2201 or equivalent.

3301. Conversation and Composition. (3). PREREQUISITE: RUSS 2202 or equivalent.

3302. Conversation and Composition. (3). PREREQUISITE: RUSS 3301 or permission of instructor.

3411. Survey of Early Russian Literature. (3). From earliest chronicles, folktales, and legends through classical period to end of eighteenth century.

3441. Early Nineteenth-Century Russian Literature. (3). Introduction to major Russian prose works

of the nineteenth century. Representative works from Pushkin, Lermontov, Gogol, and Turgenev.

3442. Nineteenth-Century Russian Realism. (3). Readings in representative works of Dostoevskii, Tolstoi, Chekhov, and Gorkii.

3443. Twentieth-Century Russian Prose. (3). Introduction to major Russian prose writers of the twentieth century. Authors include Bunin, Zamiatin, Belyi, Bulgakov, Sholokhov, Solzhenitsyn, Trifonov, and V. Rasputin.

3444. Twentieth-Century Russian Poetry. (3). Introduction to major Russian poets of the twentieth century. Authors include Blok, Briusov, Akhmatova, Mandelshtam, Maiakovskii, Pasternak, Tvardovskii, and Evtushenok.

3611. Survey of Russian Civilization. (3). Russia and its people; highlights of Russian civilization as revealed in the fields of literature, music, painting, and architecture. *May not be used for Russian language credit.*

4309. The Art of Translating Russian. (3). Translations of material from Russian to English in approved content area. PREREQUISITE: RUSS 2202 or equivalent.

4780. Individual Studies in Russian. (1-3). Directed individual study in selected areas of Russian chosen in consultation with instructor. Repeatable for a maximum of six semester hours credit by permission of chairman. PREREQUISITE: Permission of instructor.

E200 SPANISH (SPAN)

1101. Elementary Spanish. (3). Elements of grammar and pronunciation; reading of simple selections. *Students presenting Spanish to meet university admission requirements cannot receive credit for SPAN 1101. Credit cannot be received for both 1101 and 1199.*

1102. Elementary Spanish. (3). PREREQUISITE: SPAN 1101 or equivalent college-level credit. *Credit cannot be received for both SPAN 1102 and 1199.*

1112. Intensive Elementary Spanish. (6). First year college Spanish. Elements of grammar, pronunciation, and conversation. Simple readings. Covers material of SPAN 1101 and 1102. Meets five days a week. *A maximum of six hours credit may be received for any combination of SPAN 1101, 1102, and 1112.*

1199. Review of Basic Spanish. (3). Grammar and review for those who have already studied Spanish in high school. Preparation of SPAN 2201. *Credit cannot be received for both SPAN 1102 and 1199 nor for 1101 and 1199.*

2201. Intermediate Spanish. (3). Comprehensive review of Spanish grammar, exercises in writing, conversation, and readings in Hispanic literature and culture. PREREQUISITE: SPAN 1102 or 1199 or equivalent.

2202. Intermediate Spanish. (3). More advanced readings. PREREQUISITE: SPAN 2201 or equivalent.

2212. Intensive Intermediate Spanish. (6). Comprehensive review of Spanish grammar. Exercises in writing, conversation. Readings in Hispanic literature and culture. Covers material of SPAN 2201 and 2202. Meets every day. *A maximum of six hours credit may be received for any combination of SPAN 2201, 2202, and 2212.*

3301. Conversation. (3). (3300). Not intended for students with native or near-native proficiency in Spanish. PREREQUISITE: SPAN 2202 or equivalent.

3302. Advanced Conversation. (3). (3300). Required of majors and minors. PREREQUISITE: SPAN 3301 or permission of instructor.

3303. Composition. (3). (3300). Practice in writing with emphasis on content, organization, and style. Not intended for students with native or near-native proficiency. PREREQUISITE: SPAN 2202 or equivalent.

4302-6302. Advanced Grammar. (3). Special problems in grammar; recommended for majors and minors. PREREQUISITE: SPAN 3301, 3302, 3303, or equivalent.

4306-6306. Applied Spanish Linguistics. (3). (4501) Current research in linguistics, psycholinguistics and sociolinguistics and their contribution to second-language teaching and second-language learning.

4410-6410. Spanish Literature and Civilization. (3). (3410). Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: SPAN 3301 or 3302 or equivalent.

4431-6431. Contemporary Spanish Prose. (3). Spanish prose from Generation of 1898 to present. PREREQUISITES: SPAN 3411 and 3412, or permission of instructor.

4432-6432. Contemporary Spanish Poetry and Drama. (3). Spanish poetry and drama from Generation of 1898 to present. PREREQUISITES: SPAN 3411 and 3412, or permission of instructor.

4510-6510. Spanish American Literature and Civilization. (3). (3510). Survey of literary movements and major figures with readings in literature and civilization. Required of majors. PREREQUISITE: SPAN 3301 or 3302.

4561-6561. Pre-Contemporary Spanish American Prose Fiction. (3). Development of Spanish American novel and short story from beginnings through 20th century. PREREQUISITE: SPAN 4510.

4562-6562. Contemporary Spanish American Prose Fiction. (3). Spanish American novel and short story of 20th century. PREREQUISITE: SPAN 4510.

4701. Spanish for Commerce I. (3). (3791). Spanish business terminology and correspondence. PREREQUISITE: Any 3000 level Spanish course or permission of instructor.

4702. Spanish for Commerce II. (3). (3792). Business concepts and documents. PREREQUISITE: Any 3000 level Spanish course or permission of instructor.

4780. Individual Studies in Spanish. (1-3). Directed individual study in selected areas of Spanish chosen in consultation with instructor. Repeatable for a maximum of six semester hours credit by permission of chairman. PREREQUISITE: Permission of instructor.

4790-99-6790-99. Special Topics in Literature and Linguistics. (3). Literary topics include medieval literature, Golden Age, 19th century literature, and Spanish American drama. May be repeated for maximum of 6 hours credit. PREREQUISITE: Permission of instructor.

characteristics as language, religion, politics, and economics. [G].

3200. Peoples and Cultures of the World (Same as ANTH 3200). (3). Major ethnographic areas and selected cultures of world.

3221. Principles of Conservation. (3). Development of conservation ethic and wilderness concepts; survey of environmental problems, land use, and energy and resource utilization; soil erosion and crop productivity relationships.

3401. Historical Geography of the U.S. (3). Evolution of the cultural landscapes of the United States with emphasis on the interaction of environment and people in the development of this nation. [G].

3430. Economic Geography. (3). Spatial characteristics and distribution of economic activities.

3451. Introduction to Urban Planning. (3). Introduction to regional and urban planning, emphasizing spatial relationships of physical, economic, and cultural phenomena necessary in planning process.

3501. Map Reading. (3). Comprehensive study of maps as geographic tools that enable user to gain knowledge of earth through map reading and map interpretation and to make intelligent use of such map information.

3503. Map Design. (3). Introduction to cartographic theory, planning and construction of maps. Two lecture, two laboratory hours per week.

4111-6111. Synoptic Meteorology I. (4). Basic weather parameters and atmospheric processes in weather analysis and forecasting. Three lecture, two laboratory hours per week. PREREQUISITE: GEOG 1101 or consent of instructor.

4112-6112. Synoptic Meteorology II. (4). Advanced forecasting skills techniques and detailed specifics of weather forecasting, including severe weather and aviation forecasting. Three lecture, two laboratory hours per week. PREREQUISITE: GEOG 4111.

4115-6115. Dynamic Meteorology I. (3). Fundamental forces applicable to large scale atmospheric motions, including circulation and vorticity. PREREQUISITES: MATH 1321, 2321; PHYS 2511.

4116-6116. Dynamic Meteorology II. (3). Atmospheric oscillations, numerical modelling explored from mathematical and physical orientation. PREREQUISITE: GEOG 4115.

4121-6121. Earth Science. The Earth. (3). Land forms, their changes, and their uses to man.

4122-6122. Earth Science. The Soil. (3). Processes and dynamics of soil profile development. Major models of soil development examined and applied to soil genesis in Tennessee. Application of soil techniques to archaeology, planning, earth sciences, and soil conservation and erosion problems. Emphasis on field and laboratory techniques with field work in soil mapping and soil taxonomy. Two lecture, two laboratory hours per week.

4131-6131. Earth Science. The Oceans. (3). Analytical study of the oceans to include their physical, chemical, and biological qualities; their movements, resources, climatic influences, and importance for transportation.

4201-6201. Urbanization and Environment. (3). Ways man has changed natural environment by urbanization and how physical features and processes influence development and function of cities.

4211-6211. Climatology. (3). Climatic elements and methods of data analysis; applications of climatology in agriculture, health, economics, and architecture. PREREQUISITE: GEOG 4111 or consent of instructor.

4215-6215. Physical Climatology. (3). Components of earth's energy balance; emphasis on solar radiation, heat transfer, and evapotranspiration. PREREQUISITE: GEOG 4211 and PHYS 2112 or equivalents.

4231-6231. Water Resources. (3). Hydrologic processes and their application to needs of cities, industry, agriculture, and recreation.

4251-6251. Environmental Threats to Human Survival. (3). Survey of environmental threats, some of which may threaten survival of human species. Spectrum of threats ranges from planet-wide climatic changes and potential changes in earth-sun relationships to more immediate threats such as inadequate food production, local disasters, and nuclear contamination.

4304-6304. Geography of Europe. (3). Geographic analysis of lands west of Iron Curtain.

4305-6305. Geography of the USSR. (3). Regional analysis of Soviet Union and its satellites.

4306-6306. Geography of Asia. (3). Significance of regional differences in Japan, China, and India, and brief survey of remaining areas.

4313-6313. Geography of the United States and Canada. (3). Physical, cultural, and economic characteristics of United States and Canada.

4316-6316. Geography of the South. (3). Selected regions in South; emphasis on changes and trends in cultural-physical complex.

4324-6324. Geography of Middle America. (3). Regions and resources of Mexico, Central America, and West Indies related to present and potential economic development.

4325-6325. Geography of South America. (3). Regional economies, resources, and trade in the continent; with stress on changing significance of landscape related to national problems.

4431-6431. Urban Geography. (3). Allocation of land for urban uses; adjustments and adaptations to existing physical phenomena; patterns, functions, and forms of specific urban land areas; and some continuous problems of urban development and growth.

4442-6442. Geography of Business and Industrial Location. (3). Geography of retailing, wholesaling, and manufacturing; emphasis on locational analysis of selected business enterprises.

4443. Transportation Planning. (3). Planning for various transportation modes and networks and impact they have on land use and contemporary development problems.

4453-6453. Geography of Food and Agriculture. (3). Ability of earth-surface areas to produce food necessary to sustain rapidly growing world population. Includes environmental constraints which tend to limit food production and produce food supply crises.

4502-6502. Computer Mapping. (3). Use of computer mapping programs as effective techniques for visual presentation of wide variety of data. Two lecture, two laboratory hours per week. PREREQUISITE: BASIC, FORTRAN, or other computer language.

4503-6503. Map Production. (3). Scribing, color separation, printing, and darkroom processes. Two lecture, two laboratory hours per week.

4510-6510. Aerial Photo Interpretation. (3). (Same as GEOL 4510) Elements and steps involved in interpreting, measuring, and mapping of images appearing on aerial photographs. Two lecture, two laboratory hours per week.

4511-6511. Remote Sensing of the Environment. (3). (Same as GEOL 4512) Survey of theory and application; using color, infrared, thermal, and radar images generated from aircraft and satellites for geographic, environmental, and planning purposes. Two lecture, two laboratory hours per week. PREREQUISITE: GEOG 4510 or consent of instructor.

4514-6514. Geographic Information Systems. (3). Role and nature of using interactive computer mapping for decision support in resource management. Structure and use of spatial databases in the decision process. Two lecture, two laboratory hours per week.

4521-6521. Quantitative Methods. (3). Introduction to quantitative methods in spatial analysis. [C].

4531-6531. Field Methods. (3). Basic methods of geographic analysis used in classifying, analyzing and reporting field-generated data including field mapping, sampling procedures, questionnaires, and archival and public document research. One and one-half lecture, three laboratory hours per week.

4551. Urban Planning Studio. (3). Application of planning process to urban problems and preparation of plans for the urban area. PREREQUISITE: GEOG 3451 or consent of instructor.

4610-19. Special Topics in Geography. (1-3). Topics are varied and announced in *Schedule of Classes*.

4621. Independent Study. (1-3). Student, under faculty supervision, studies in-depth particular geographic topic. Repeatable with change in content to maximum of 3 semester hours.

4700-6700. Geography Internship. (1-9). Experience working with agency in which geographic knowledge can be utilized. Repeatable to maximum of 9 semester hours. (S/U).

4801. Geographical Thought and Application. (3). Major concepts in environmental/earth sciences,

GEOGRAPHY AND PLANNING

PROFESSOR

W. THEODORE MEALOR, JR., Chair
Room 107, Johnson Hall

The prerequisite for all 3000 and 4000 level courses is either junior standing (a minimum of 55 semester hours credit) or the permission of the instructor.

NOTE: Students eligible to repeat a course to improve a grade in GEOG 2301 or GEOG 2311 may use the grade earned in GEOG 1301 to improve a grade in either GEOG 2301 or GEOG 2311, but not both.

E220 GEOGRAPHY (GEO)

1101. Introduction to Earth Science: Weather and Climate. (4). Atmospheric processes and geographic distribution of radiation, moisture, pressure, and circulation interacting to create weather systems and storms; oceanic influences, earth-sun relationships, global climate patterns; human interaction with atmosphere. Three lecture, two laboratory hours per week. [G].

1102. Introduction to Earth Science: Landforms. (4). Agents and processes of landform development and geographic relationships of landscapes including volcanic, fluvial, glacial, and coastal environments; soil development and vegetation associations; environmental hazards to humans; maps and aerial photo interpretation as sources of environmental information. Three lecture, two laboratory hours per week. [G].

1301. Survey of World Regions. (3). Survey of economic, cultural and physical traits characteristic of developing and industrialized nations. [G].

1401. Introduction to Cultural Geography. (3). Geographical aspects of human behavior. Focuses on distributional patterns and interactions of such cultural

human/cultural, and economic/urban geography. Pro-seminar format requires review of readings with oral and written presentations. Focus on synthesis and application of geographic concepts to contemporary research themes. PREREQUISITE: senior standing.

GEOLOGICAL SCIENCES

PROFESSOR

PHILI DEBOO, Chair
Room 402 J. M. Smith Hall

E235 GEOLOGY (GEOL)

1101. Physical Geology. (4). Introduction to processes that operate within and on surface of earth; forces that make mountains and valleys, and those that move continents; special emphasis on topics important to Mid-South, such as earthquakes, rivers, and groundwater. *Three lecture, two laboratory hours per week.* [G].

1102. Historical Geology. (4). (1201). Overview of history of earth and its life as interpreted from rock and fossil record; origins of continents, mountain ranges, ocean basins and natural regions of U.S. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1101. [G].

3211. Introduction to Paleontology. (4). Fossil invertebrate animals and their importance in interpretation of ancient environments, evolution, and geologic time. *Three lecture, two laboratory hours per week.* PREREQUISITES: GEOL 1101, 1201.

3301. Earth Materials. (4). Hand specimen identification and classification of minerals and rocks; environments of mineral and rock genesis. *Two lecture, four laboratory hours per week.* PREREQUISITE: GEOL 1101.

3302. Physical and Optical Crystallography. (4). Crystal structure of minerals and its relation to physical and optical properties. Optical and X-ray determinative techniques. *Two lecture, four laboratory hours per week.* COREQUISITES: GEOL 3301, CHEM 1111.

3512. Structural Geology. (3). Structures of the crust; geometry of folds and faults, rock deformation, criteria for recognizing structures, solution of geometrical problems. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1101, MATH 1321, or consent of instructor.

3712. Sedimentology and Stratigraphy. (4). Origin and classification of sedimentary rocks and mutual relationship of sedimentary rock bodies both geographically and through geologic time. Lecture emphasizes comparison of modern depositional systems with their ancient counterparts. Laboratory emphasizes hand specimen analysis and preparation of geologic maps. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1201.

3802. Introduction to Oceanography. (3). Origin, chemistry, water circulation, shoreline and deep water characteristics of oceans; its role in evolution and history of earth; marine life and its ecology.

4010-6010. Special Topics in Geological Sciences. (3). Topics vary and are announced in the Schedule of Classes.

4100-6100. Petroleum Geology and Basin Analysis. (3). Application of geologic principles to search for economic accumulations of oil and gas; lab emphasis on prospect selection using subsurface techniques, lecture emphasis on depositional models and depositional systems. *Two lecture, two laboratory hours per week.*

4202-6202. Geomorphology. (4). Description, origin and interpretation of landforms and their relationships to underlying structure and geologic history. Processes acting on earth's surface, including active tectonics; weather; mass-wasting; climate change; and fluvial, shoreline, and glacial processes. *Three lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1201.

4211-6211. Physical Hydrogeology. (3). Movement, storage and development of groundwater. Groundwater in the hydrologic cycle. Aquifer characteristics and tests. *Two lecture, two laboratory hours per week.* PREREQUISITE: GEOL 1101.

4212-6212. Chemical Hydrogeology. (3). Chemical reactions, equilibria and disequilibria in the groundwater

environment. Chemical evolution of groundwater. Contaminants in groundwater. *Two lecture, two laboratory hours per week.* PREREQUISITES: GEOL 4211 and CHEM 1112.

4322-6322. Petrology. (4). Description and interpretation of igneous and metamorphic rocks through study of thin sections. *Two lecture, four laboratory hours per week.* PREREQUISITE: GEOL 3302, CHEM 1112.

4332-6332. Introduction to Geochemistry. (3). Geological and chemical processes which govern or control migration and distribution of elements and atomic species of earth in space and time. *Three lecture hours per week.* PREREQUISITE: GEOL 3302.

4341-6341. Aqueous Geochemistry. (3). Physical chemistry of aqueous solutions as applied to geochemical processes on earth's surface. PREREQUISITE: CHEM 1112.

4342-6342. Environmental Geochemistry. (3). Detailed discussion of geochemical reactions and processes as related to specific environmental problems. PREREQUISITE: GEOL 4341 or consent of instructor.

4351-6351. Advanced Structural Geology. (3). (4642). Analysis of crustal structure: stress and strain in rocks, mechanical interpretation of crustal structures. PREPRERQUISITES: GEOL 3512, MATH 1321.

4510-6510. Aerial Photo Interpretation. (3). (Same as GEOG 4510). Elements and steps involved in interpreting, measuring and mapping images appearing on aerial photographs. *Two lecture, two laboratory hours per week.*

4511-6511. Economic Mineral Deposits. (3). Origin, occurrence, and composition of metallic and non-metallic mineral deposits. *Three lecture hours per week.* PREREQUISITES: GEOL 3301, 3302, and 3512.

4512-6512. Remote Sensing of the Environment. (3). (Same as GEOG 4511). Theory and application of using color, infrared, thermal and radar images generated from aircraft and satellites for geographic, geologic, environmental and planning purposes. PREREQUISITE: GEOL 4510.

4622. Geology Field Camp. (6). Preparation of structural and lithologic maps in prescribed geologic areas using topographic maps and aerial photographs. Instruments used are the alidade and the Brunton compass. Offered in summer school only. PREREQUISITES: GEOL 3302, 3512.

4701-6701. Spring Field Trip. (1-2). Conducted field trips during spring vacation. About 30 hours of field work follow 2-4 hours of lectures. Open to non-majors. Among areas which may be included are Ouachita-Arbuckle-Wichita Mountains of Oklahoma; Ouachita, Ozark dome and adjacent mineral districts; central and southern Appalachians; and Gulf Coastal Plain. Check *Schedule of Classes* for specific location. NOTE: May be repeated three times when location varies. A total of no more than 8 hours credit may be earned. *Dates, hours and credits to be arranged.* PREREQUISITE: consent of instructor.

4721. Investigations in Geology. (1-3). Individual or group work on topics of current interest. PREREQUISITE: consent of instructor.

4731. Senior Thesis. (1-3). Original study, on subject of geological significance, to be carried on independently by student with faculty supervision. PREREQUISITE: senior standing in Geology.

E237 GEOPHYSICS (GEOP)

4101-6101. Introduction to Geophysics. (3). (GEOL 4652). Fundamental topics: earth's age and their thermal state, main gravity and magnetic fields; dynamic models of earth's interior; comparison of terrestrial planets. PREREQUISITES: PHYS 2111, MATH 1321.

4201-6201. Applied Geophysics. (4). (GEOL 4632). Geophysics prospecting methods; seismic reflection and seismic refraction techniques, and electrical, magnetic, and gravity field measurements with emphasis of fundamental principles governing acquisition and interpretation of geophysical data. *Three lecture, two laboratory hours per week.* PREREQUISITE: consent of instructor.

4401-6401. Introduction to Seismology. (3). (GEOL 4440). Wave propagation in the earth. Topics include elasticity, elastic wave equation, vibration and waves, body and surface elastic waves, seismic rays, reflection and refraction of seismic waves, and the earthquake

source. *Two lecture, two laboratory hours per week.* PREREQUISITE: MATH 6391 or consent of instructor.

4722. Investigations in Geophysics. (1-3). (GEOL 4722). Individual or group work on topics of current interest in the broad field of geophysics. PREREQUISITE: consent of instructor.

4931. Senior Thesis. (1-3). Original study on subject of geophysical significance, to be carried on independently by student with faculty supervision. PREREQUISITE: senior standing.

HISTORY

PROFESSOR

ABRAHAM D. KRIESEL, Chair
Room 100, Mitchell Hall

All candidates for graduation at Memphis State University are required to complete History 2601 or 2602.

E240 HISTORY (HIST)

1301. The Development of World Civilization I. (3). Especially recommended for freshmen. Traces forms of civilization from beginnings to 1500. [G].

1302. The Development of World Civilization II. (3). Especially recommended for freshmen. Traces forms of civilization from 1500 to present. [G].

2601. The United States to 1877. (3). United States from discovery to end of political reconstruction. [G].

2602. The United States since 1877. (3). United States from 1877 to present. [G].

3010. Special Issues in History. (3). May be repeated for a maximum of nine hours when the topic varies.

3031. History of Technology. (3). Technological development and its relationship to its historical context from earliest times to present.

3035. Technology and Culture in American History. (3). Interrelationship between technology and culture; emphasis on 19th and early 20th centuries.

3040. Research Tools for the Humanities. (3). Introduction to history of computing; familiarization with computers, operating systems, word processing, database management, spreadsheets, statistical analysis, and bibliographical search; consideration of social, ethical, and legal implications of computers; emphasis on applications to humanities. NOTE: beginning knowledge of basic statistics recommended.

3121. England Before 1714. (3). Political, constitutional, cultural, social, and economic development of England from coming of Anglo-Saxons until Hanoverian accession in 1714.

3122. England Since 1714. (3). Development of England's democratic government, considering economic, social, intellectual, diplomatic, and imperial affairs.

3211. Colonial Latin America. (3). Political, economic, social and cultural development in Latin America from pre-conquest era to 1808.

3212. The Latin American Nations. (3). Major political, economic, and social trends in Latin America since 1808. Emphasis on Argentina, Brazil, Chile, and Mexico.

3271. The Middle East. (3). Political, diplomatic, social and religious developments in Middle East from 1800 to present.

3275. History of the Jewish People. (3). History of Jewish people from antiquity to present; emphasis on their changing relationships to larger cultures in which they participated.

3290. Traditional Asia. (3). Comparative survey of civilizations in India, China, Japan, and Southeast Asia, from their beginnings through the 18th century.

3291. Modern Asia. (3). Asia from 1800 to present, focusing on Asian reactions to colonialism, and rise of modern nation states in India, Japan, China, and Southeast Asia.

3301. Early Modern Europe, 1500-1800. (3).

3302. Modern Europe, 1800 to Present. (3).

3320. The Ancient World. (3). Survey of civilizations of ancient Egypt and the Near East, Greece, and Rome.

3506. Cultural and Intellectual History of Europe. (3). (4506). Topics in history of European culture and thought from late Middle Ages to twentieth century. [W].

3803. American Diplomatic History. (3). Though including the 18th and 19th centuries, course concentrates on 20th. Emphasizes relationship between foreign policy and domestic forces. *Note: Students who have received credit for HIST 3801 or 3802 will not be allowed credit for HIST 3803.*

3811. United States Military and Naval History. (3). (4811). (Same as Army 2105) Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military-naval sectors in democracy.

3817. Vietnam War in Global Perspective. (3). Traditional Vietnamese culture, its response to contact with the West and, more extensively, involvement of United States in the Indochina War.

3823. Economic History of the United States. (3). *Note: Students who have received credit for HIST 3821 or 3822 will not be allowed credit for HIST 3823.*

3840. United States Constitutional History. (3). Constitutional developments from colonial period to present; emphasis on English heritage, constitutional antecedents of revolutionary era, origins and growth of federal system under Constitution of 1787, and evolution of modern constitutional government in United States.

3863. Social and Intellectual History of the United States. (3). *Note: Students who have received credit for HIST 3861 or 3862 will not be allowed credit for HIST 3863.* Survey of way Americans have thought about essential features of social and political order. Focus of course on development of and debate over central ideas of equality, freedom, and individualism that have defined the order of the common life. [G].

3865. History of Immigration to United States. (3). Nature and effects of immigration to United States from 1776 to present.

3900. History of Tennessee. (3). Political, economic, and social development of Tennessee from earliest times.

3905. History of Memphis. (3). Political, social and economic aspects of development of Memphis from foundation to present.

3920. The Old South. (3). Southern institutions prior to outbreak of Civil War.

3930. The New South. (3). South from Civil War to present.

3940. The West. (3). Significance of frontier in development of United States from Revolutionary period to 1890.

4003. The Philosophy of History. (3). History as a distinct discipline. Thought of leading Western philosophers of history about nature of history in its two senses — history as actuality and history as thought about actuality.

4012. Directed Readings, Honors. (3). Under the direction of faculty member, student reads about particular topic or topics. PREREQUISITE: admission to Honors Program.

4014. Directed Readings. (1-3). Readings on particular topic in history under supervision of member of faculty.

4020-6020. Internship in History. (3-12). Supervised internships working with various governmental agencies, private foundations or business of interest to historians. May be repeated for up to 12 hours credit. Prerequisite: permission of department.

4050-59-6050-59. Special Topics in History. (1-3). Intensive study of selected topics; topic announced in *Schedule of Classes*.

4126-6126. Victorian and Edwardian England. (3). Social, political, and cultural adjustments of England to experience of industrialization in 19th and early 20th centuries.

4145-6145. History of Modern Germany. (3). Germany from origins of unification movement in Napoleonic Era through Second World War.

4160-6160. Russia to 1917. (3). Russia from earliest times to 1917; emphasis on the rise of serfdom and autocracy and evolution of revolutionary movement.

4162-6162. History of the Soviet Union. (3). Detailed study of 1917 Revolution and major developments in government, economy, cultural and social life, and international affairs which followed.

4163-6163. History of Socialism and Marxism. (3). Socialist and Marxist thought and rise of socialist and Marxist social and political movements in Europe, Russia and Far East. Unique social, economic, and political conditions which gave rise to experimentation with and application of Marxism.

4200-6200. History of Spain. (3). (3200). Spanish institutions, culture and politics from ancient times to present.

4240-6240. History of Mexico. (3). Political, economic, social, and cultural development of Mexico from ancient times to present.

4250-6250. History of Brazil. (3). Political, economic, social, and cultural development of Brazil from early times to the present.

4260-6260. The World Since 1945. (3). Global ideological, economic and political developments since World War II. Emphasizes rising affluence of industrial free market, movement of former colonies to independence, and growth in diversity among Soviet bloc nations.

4281-6281. Africa South of the Sahara. (3). Emphasis on black Africa in nineteenth and twentieth centuries. Age of imperialism and impact of West on Africa, colonial policies of European powers; rise of nationalist movements; problems of newly independent nations; role of African countries in world affairs.

4282-6282. The History of North Africa. (3). Emphasis on nineteenth and twentieth centuries. Extension of European influence and control; rise of nationalist movements; role of these areas in world affairs.

4283-6283. The History of Southern Africa. (3). European colonization and impact on African people from 1652 to date in Republic of South Africa, Rhodesia, and former High Commission territories.

4292-6292. History of Modern China, 1800 to the Present. (3).

4294-6294. History of Modern Japan, 1800 to the Present. (3).

4295-6295. Intellectual History of East Asia Since 1800. (3). Evolution of modern Chinese and Japanese thought.

4320-6320. Ancient Near East. (3). From beginnings in Egypt and Mesopotamia to great empires of Assyria, Babylon, Persia.

4321-6321. The Greek Experience. (3). Politics, society and culture in ancient Greece to Alexander the Great.

4322-6322. The Roman World (3). Hellenistic kingdoms and Roman Empire.

4361-6361. History of the Byzantine Empire. (3). Byzantine or East Roman Empire from 330 to 1453 and its influence on Slavic, Turkic, and Islamic peoples.

4371-6371. Early Middle Ages. (3). Late Roman Empire, migration period, emergence of Islamic, Byzantine, and West European cultures through period of Investiture Controversy.

4372-6372. The High Middle Ages. (3). Urban emergence, growth of feudal monarchy, foundations of modern political institutions, medieval universities, and intellectual fabric of scholasticism.

4380-6380. Renaissance Europe, 1300-1520. (3). Transition from medieval to early modern institutions in Europe; emphasis on urban growth, capitalism, emergent nationalism, international diplomacy, and humanism.

4390-6390. Europe in the Age of the Reformation. (3). Characteristic political, social, economic, intellectual, and cultural developments and religious conflicts of late fifteenth and sixteenth centuries.

4401-6401. Europe in the Age of the Baroque. (3). Political crises, development of monarchical absolutism, rise of modern science, and cultural synthesis in seventeenth century.

4440-6440. The Era of the French Revolution. (3). The Old Regime, origins and development of Enlightenment thought, and revolutionary and counter-revolutionary movements in 18th century Europe.

4453-6453. Europe, 1815-1914. (3). *Note: Students who have received credit for HIST 4451 or 4452 will not be allowed credit for HIST 4453.*

4461-6461. Europe, 1914-1945. (3).

4503-6503. Disease and Medicine in History. (3). How various diseases and the medical attempts to conquer them influenced economic, political, and social action throughout history. Emphasis on significant work in history of public health and speculation about importance of environmental factors in man's future.

4620-6620. Colonial America, to 1783. (3). Political development and economic, social and cultural institutions of English Colonies in America, including origins and conduct of American Revolution.

4630-6630. The New Nation, 1783-1815. (3). (4641).

4640-6640. Jacksonian America, 1815-1850. (3). (4642).

4670-6670. Civil War and Reconstruction, 1850-1877. (3). (4460).

4680-6680. Emergence of Modern America, 1877-1914. (3). United States from end of Reconstruction to outbreak of World War I.



4701-6701. **The United States, 1914 to the Second World War.** (3). United States from outbreak of World War I to World War II.

4702-6702. **United States from the Second World War.** (3). The United States from World War II to present.

4823-6823. **American Labor History.** (3). Historical development of labor movement in United States; emphasis on social, economic, and political trends related to labor movement.

4824-6824. **Business History.** (3). Historical development of business in the United States; attention to social, economic, and political trends related to American business communities.

4831-6831. **History of American Family.** (3). Analysis of changes in family size and structure and relationships between family and society from colonial times to present.

4851-6851. **History of Women in America.** (3). History of women from discovery of America to present. [G].

4861-6861. **Parks/People/Public Policy.** (3). Comparative study of history and administration of public land areas in the United States, and of American conservation.

4863-6863. **History of Childhood in America.** (3). Historical consideration of children and childhood in American society from early 17th century to present.

4871-6871. **United States Urban History.** (3). (3871). Development of American cities, including formation of local social, economic, and political institutions, and impact of urbanization on United States.

4881-6881. **Black American History.** (3). History and culture of Afro Americans in light of their experiences; aspects of Black American life and attitudes of dominant society within which Blacks lived; ways Black men and women shaped and nurtured their own lives, culture and history in U.S. [G].

4941-6941. **History of the American Indian.** (3). Role of Indian in American history.

4996. **Honors Thesis.** (3). Under the direction of faculty member, and with approval of the Honors Committee, student writes thesis based on research in primary and/or secondary sources. PREREQUISITE: admission to the Honors Program.

INTERNATIONAL RELATIONS

ASSOCIATE PROFESSOR

J. REX ENOCH, *Director*

Room 225, Clement Humanities Building

E245 INTERNATIONAL STUDIES (INTL)

1101. **Analysis of Developing Nations.** (3). Interdisciplinary survey of developing nations, other societies and problems of technologically developing nations. Basic concepts and methods of social sciences employed to study processes of social change in cross-cultural comparison. NOTE: A student may not receive credit for both INTL 1101-1102 and UNIV 1401.

1102. **The Third World: A Regional View.** (3). Interdisciplinary survey of contemporary developing nations within a major world region. Regional focus on Africa, Latin America, Southeast Asia, or Indian Subcontinent.

4601. **Seminar in International Relations.** (3). Investigation of selected topics in international relations from interdisciplinary perspective. Individual research and presentation of major paper which integrates tools, data or concepts of two or more disciplines. PREREQUISITE: permission of International Relations advisor.

MATHEMATICAL SCIENCES

PROFESSOR RALPH J. FAUDREE, *Chair*

Room 373, Dunn Mathematics
Foreign Languages Building

computer science for students in all departments of the University, with specially designed programs for the principal divisions of the University. Courses which satisfy specific graduation requirements of the several colleges may be found in the description of the degree requirements for the specific college.

The courses MATH 1211 and 1212 provide preparatory instruction, as needed, for required courses, MATH 1211 provides preparation for MATH 1212, and MATH 1212 provides preparation for MATH 1321. For students who do not possess the level of preparation or competency to achieve success in college level courses, Academic Services and Developmental Studies provides a testing and placement program, and offers special courses in arithmetic and elementary algebra (R&DS 0720, 0820, and 0821). Students must display a level of competency as found in R&DS 821 to enter the college level courses in mathematics.

E280 MATHEMATICS (MATH)

0990. **Foundations of Geometry.** (3). Axiomatic development of plane geometry; emphasis on concepts of symmetry, congruence and similarity, Pythagorean Theorem and special right triangle properties; area and volumes of special right triangle properties; area and volumes of special two and three-dimensional figures. NQTE: Will not count toward the 132 semester hour degree requirement for any degree. PREREQUISITE: Two units of high school algebra or R&DS 0821.

1181. **Concepts of Number.** (3). Introduction to logic; set theory; development and applications of numeration systems; mathematical systems and algorithms. PREREQUISITE: Two units of high school algebra or one unit of algebra and one unit of geometry or R&DS 821. [G].

1182. **Concepts of Algebra.** (3). Algebraic structures, combinatorics, statistics, mathematical proof, problem solving. PREREQUISITE: MATH 1181. [G].

1211. **College Algebra.** (3). Systems of equations and inequalities, mathematical induction, matrix methods, partial fractions, synthetic division, theory of equations, sequences and series. NQTE: MATH 1211 and 1213 will not satisfy a six semester hour Mathematics requirement. PREREQUISITE: Placement test recommended but not required. Two units of high school algebra or R&DS 0821.

1212. **Trigonometry.** (3). Circular functions; inverse circular functions; graphs of circular and inverse functions; identities; equations; angles; trigonometric functions; solution of triangles; elementary application of vectors; trigonometric form of complex numbers. PREREQUISITE: Placement test recommended but not required; MATH 1211. NOTE: MATH 1212 and MATH 1213 will not satisfy a six semester hour Mathematics requirement.

1213. **College Algebra and Trigonometry.** (4). Exponents; radicals; quadratic functions; inequalities; relations and functions; inverse, exponential and logarithmic functions; solution of algebraic systems; trigonometric functions; identities, equations and graphs; angle measurements; sum, difference, half-angle and double-angle formulas; solution of triangles; laws of sines and cosines. NOTE: MATH 1211 and 1213, or 1212 and 1213 will not satisfy a six semester hour Mathematics requirement.

1312. **Elementary Calculus.** (3). Introduction to concepts and methods of elementary calculus of one real variable as related to rational, exponential, and logarithmic functions; nature of derivatives; differentiation; application of derivative; nature of integration; definite integral; applications of definite integral. NOTE: Only one of the courses MATH 1312 or 1321 may be used to satisfy degree requirements. PREREQUISITE: MATH 1211. [G].

1321. **Analytic Geometry and Calculus.** (4). Essentials of analytic geometry of the plane; nature of derivatives; differentiation of algebraic and trigonometric functions; applications of derivatives and antiderivatives. (Placement test recommended but not required.) NOTE: Only one of the courses MATH 1312 or 1321 may be used to satisfy degree requirements. Students may not receive credit for both MATH 1321 and 1401. PREREQUISITE: MATH 1211 or 1213. [G].

1401. **Honors Calculus I.** (4). Concepts and applications of differential and integral calculus presented from theoretical standpoint. NOTE: Students may not receive credit for both MATH 1401 and 1321. PREREQUISITE: Permission of Honors Committee.

1402. **Honors Calculus II.** (4). NOTE: Students may not receive credit for both MATH 1402 and 2321. PREREQUISITE: Permission of Honors Committee.

2000. **Experiences in Mathematics.** (3). Introduction to selected areas of mathematical sciences through application to modeling and solution of problems involving networks, circuits, trees, linear programming, random samples, regression, probability, inference, voting systems, game theory, symmetry and filings, geometric growth, conics, comparison of algorithms, codes and data management. PREREQUISITE: Three years of high school mathematics, including two years of algebra and one year of geometry. [G].

2321. **Analytic Geometry and Calculus.** (4). Differentiation, integration and analytical aspects of elementary transcendental functions; techniques of integration; limits and continuity; applications of definite integral; polar coordinates. NOTE: Students may not receive credit for both MATH 2321 and 1402. PREREQUISITE: MATH 1212 or 1213, and 1321.

2322. **Analytic Geometry and Calculus.** (4). Indeterminate forms; improper integrals; vectors and analytic geometry in 3-space; partial differentiation; multiple integrals; infinite series. PREREQUISITE: MATH 2321.

2401. **Honors Mathematics III.** (4). Introductory point set topology; elements of abstract algebra. PREREQUISITES: MATH 1402 and permission of Honors Committee.

2402. **Honors Mathematics IV.** (4). Topics in abstract algebra and real analysis. PREREQUISITES: MATH 2401 and permission of Honors Committee.

2581. **Concepts of Geometry.** (3). Introduction to idea of proof in postulational system; development of geometric relationships independent of number, including congruent triangles, similar triangles, parallelograms, and circles; applications of number in geometry including coordinate geometry, lengths, areas, and volumes. PREREQUISITE: MATH 1182.

2701. **Discrete Structures.** (3). Elementary logic; sets, relations, functions, orderings, equivalence relations, partitions; finite sets, modular arithmetic; natural numbers, mathematical induction, strings, string programs, connectedness, traversals, graph algorithms. PREREQUISITE: MATH 1321.

3242. **Introduction to Linear Algebra.** (3). (4241). Systems of linear equations; matrices; elementary row and column operations; determinants; vector spaces and subspaces; linear transformations. PREREQUISITE: MATH 2321 or permission of instructor. [C].

3391. **Differential Equations.** (3). Ordinary differential equations including series solutions. PREREQUISITE: MATH 2322.

4010-19-6010-19. **Special Topics in Mathematics and Statistics.** (1-3). Topics are varied and announced in *Schedule of Classes*. PREREQUISITE: permission of instructor.

4151-6151. **History of Mathematics.** (3). Development of mathematics from earliest times to present; problem studies; parallel reading and class reports. PREREQUISITE: MATH 2321 or equivalent.

4171-6171. **Special Problems in Mathematics.** (1-3). Directed individual study in selected area of mathematics chosen in consultation with instructor. Repeatable by permission of chair. PREREQUISITE: permission of instructor.

4240-6240. **Matrix Algebra.** (3). (3241). Elementary operations, special classes of matrices, determinants, eigenvalues and eigenvectors, canonical forms, and elementary computer implementation. PREREQUISITE: knowledge of Fortran and MATH 1321 or 1312. Credit may not be obtained for both 4240 and 4241.

4242-6242. **Linear Algebra.** (3). Linear transformation, polynomials, determinants, direct-sum decompositions, diagonalizable operators, rational and Jordan forms; inner product spaces, the spectral theorem. PREREQUISITE: MATH 3242.

4261-6261. **Abstract Algebra.** (3). Groups; homomorphisms; rings; integral domains; polynomials; fields. PREREQUISITE: MATH 3242 or permission of instructor.

4271-6271. **Combinatorics and Graph Theory.** (3). Graphs; covering circuits, trees and searching, network algorithms, combinatorics; counting methods, generating functions, recurrence relations, inclusion, exclusion. PREREQUISITES: MATH 2322, 2701.

4350-6350. Advanced Calculus. (3). (3111). Real number system, functions and sequences, limits, continuity, differentiation; Riemann-Stieltjes integration, series of functions. PREREQUISITE: MATH 2322 and 3242. [W].

4351-6351. Advanced Calculus. (3). Integration theory; Riemann and Lebesgue integrals; partial differentiation; implicit function theorem. PREREQUISITE: MATH 4350 or permission of instructor.

4361-6361. Complex Variables. (3). Complex numbers; analytic functions; Cauchy-Riemann conditions; Taylor and Laurent series; integration. PREREQUISITE: MATH 2322.

4381-6381. Modern Applied Mathematics I. (3). Symmetric linear systems, constraints and Lagrange multipliers, least squares and the Kalman filter, discrete and continuous equilibrium problems, variational methods, and introduction to finite element methods. PREREQUISITE: MATH 3391 and 4240 or 3242.

4382-6382. Modern Applied Mathematics II. (3). Analytic functions, conformal mappings, fast Fourier transform, initial value problems, combinatorial methods and network flows, modern methods of optimization. PREREQUISITE: MATH 4381.

4390-6390. Ordinary Differential Equations. (3). Existence and uniqueness, linear autonomous and linear non-autonomous systems, stability, classification of linear flows, boundary value problems, and numerical applications. PREREQUISITES: MATH 3391, 3242.

4391-6391. Partial Differential Equations I. (3). Laplace transforms; Fourier series; introduction to partial differential equations. PREREQUISITE: MATH 3391.

4392-6392. Partial Differential Equations II. (3). Methods of characteristics; Green's functions; existence and regularity of solutions of boundary value and Cauchy problems. PREREQUISITE: MATH 4391.

4402. Senior Honors Seminar. (3). In-depth study of one or more topics in mathematical sciences; emphasis on individual research and problem solving techniques; student writes and presents an Honors Thesis. PREREQUISITE: Open only to senior Honors Students in mathematical sciences with permission of instructor.

4411-6411. Topology. (3). Introductory set theory; metric spaces; topological spaces; continuous functions; separation axioms; separability and countability axioms; connectedness and compactness. PREREQUISITE: MATH 4350 or 3242.

4701-6701. Mathematics for Computer Scientists. (4). Basic mathematical concepts applied to problem solving in computer science: (di)graphs, trees; enumeration; recurrence relations; induction; basic probability and distributions; integer and modular arithmetic; random number generators; state sets and transition functions, finite-state machines; boolean algebra, and elementary logic. NOTE: Credit may not be obtained for both 2701 and 4701. COREQUISITE: MATH 1321.

4711-6711. Introduction to Mathematical Logic. (3). (Same as COMP 4711). Propositional logic and truth table algorithms; first order calculus: terms, formulas, sentences, models, satisfaction, truth and logical validity; proof procedures and natural deduction; completeness and incompleteness theorems; applications to artificial intelligence, computer theorem proving, and verification of computer programs. PREREQUISITES: MATH 2701 or MATH 4701 or PHIL 3621 or permission of instructor.

4721-6721. Numerical Analysis. (3). Derivation and application of computer-oriented, numerical methods for functional approximation, differentiation, quadrature, and solution of ordinary differential equations. PREREQUISITE: MATH 2321 and knowledge of Fortran.

4741-6741. Linear Programming Methods. (3). Theory of linear programming methods, problem formulation; convex sets; simplex and revised simplex methods; matrix games and linear programming. PREREQUISITES: MATH 4240 or 3242 and knowledge of Fortran.

STATISTICS (MATH)

4610-6610. Biostatistics. (3). Discrete and continuous probability distributions; one sample and two sample problems; analysis of categorical data hypothesis testing; estimation; nonparametric analysis; linear regression; analysis of variance; and biostatistical applications. Most of the examples will be taken from

biomedical sciences. PREREQUISITES: 3 hours in mathematics at the level of 1211 or above. Credit may not be obtained for MATH 4611 and this course.

4611-6611. Statistical Methods I. (3). Binomial, hypergeometric, Poisson, multinomial and normal distributions, test of hypotheses, chi-square test, t-test, F-test, etc.; non parametric tests; correlation analysis. PREREQUISITE: 6 hours in mathematics at level of MATH 1211 or above.

4612-6612. Statistical Methods II. (3). Introduction to analysis of variance, regression and analysis of covariance. PREREQUISITE: MATH 4611.

4613-6613. Introduction to Statistical Theory. (3). Sample distributions, transformations of random variables, central limit theorem, law of large numbers, unbiasedness, least squares estimations, maximum likelihood estimations, confidence, intervals, most powerful tests, Neyman-Person lemma, likelihood ratio tests. PREREQUISITE: MATH 4635. [W].

4614-6614. Applied Probability and Queueing Theory. (3). Probability and random variables, discrete and continuous probability distributions, stochastic processes, queueing theory, applications of probability and queueing theory to computer systems. NOTE: Students may not receive credit for both MATH 4614 and MATH 4635. PREREQUISITES: MATH 2321, 2701, and COMP 1900 or its equivalent.

4631-6631. Probability. (3). Basic concepts in probability; probability models; applications. NOTE: Students majoring in Mathematical Sciences may not take MATH 4631 for credit. PREREQUISITES: 6 hours in mathematics at level of MATH 1211 or above.

4635-6635. Introduction to Probability Theory. (3). Basic probability theory, random variables, discrete and continuous probability distributions, functions of one or more random variables, multivariate distributions. NOTE: Students may not receive credit for both MATH 4635 and MATH 4614. PREREQUISITE: MATH 2322.

E285 COMPUTER SCIENCE (COMP)

1200. Computer Literacy. (4). Computer and its role in modern world; history of computing and social, ethical, and legal implications of computer use; introduction to computer programming and use of programs for educational and career tasks. *Three lecture, three laboratory hours per week.* Satisfies computer literacy requirement for graduation. Credit may not be applied for degree or concentration in Computer Science. PREREQUISITES: R&DS 0821, or two units of high school algebra, or one unit of algebra and one unit of geometry.

1900. Computer Programming. (4). (1000). Principles of computer programming style, expression, and documentation; design specifications, algorithmic problem solving, stepwise refinement, storage variables and structures, assignments, primitive operations, and branching; coding in high-level programming language: data typing, standard procedures and functions, subprograms and parameters, control structures, and I/O. Note: For Computer Science majors. Non-majors should elect COMP 4001. PREREQUISITE: MATH 1211. *Three lecture hours, two laboratory hours per week.*

2150. Date Structures. (3). Recursive procedures. Representation, programming and applications of basic data structures including linked lists stacks, queues, trees, and sets. Basic sort and search algorithms. Hasing. PREREQUISITE: COMP 1900 and MATH 1321; COREQUISITE: MATH 2701.

3160. File Processing. (3). (4160). Concepts of record, file, paging, blocking, compaction, database; sequential bulk storage devices, external sort/merge algorithms, algorithms for updating sequential files, linked lists, file-oriented tree structures, traversing and balancing trees, network concepts; random access bulk storage devices, algorithms and storage of inverted files, multilists, indexed sequential and hierarchical structures, file I/O. PREREQUISITE: COMP 2150.

3230. Assembly Language Programming. (3). (MATH 4711). Computer machine language: opcodes, addressing modes, arithmetic and logic, program control, interrupts; symbolic coding and assembly systems: labels, mnemonics, expressions, assembler directives, assembly process; program design, coding, testing, tracing, and debugging; advanced assembler features; partial assembly, program segmentation, loading, and linking, macro instructions. PREREQUISITE: COMP 1900.

3420. Computer Organization. (3). Binary signals, combinational and sequential logic networks; computer structure, memory, control, processing, and I/O units; bus-structured systems, fetch-execute cycle, timing, principal instruction types and execution, addressing and accessing techniques, interrupts; standard communication codes, parity, encoders, decoders, and code conversion. PREREQUISITE: COMP 1900. COREQUISITE: COMP 3230.

3720. Intelligent Systems—Human And Machine. (3). (Same as PHYS 3720). Intelligence and artificial intelligence, the brain, the computer, limits of computation, knowledge representation, deductive and inductive reasoning, problem solving and theorem proving, learning, language and communications, expert systems, vision, machine vision, connectionist models. PREREQUISITES: MATH 1321 or 2701, and programming experience in some high level language.

4001-6001. Computer Programming. (3). (MATH 4710). Algorithmic problem solving, formalization of algorithms, stepwise refinement; the BASIC and FORTRAN programming languages: constants, variables, data types, arithmetic expressions, assignment statements, logical expressions, branching, iteration, subprograms and parameters, I/O, string manipulation, programming style. NOTE: Computer Science majors may not use COMP 4001 to fulfill degree requirements. PREREQUISITE: MATH 1211.

4002-6002. Accelerated Computer Programming. (3). Principles of computer programming style, expression, and documentation: design specifications, algorithmic problem-solving, stepwise refinement, storage variables and structures, assignments, primitive operations, and branching; coding in a high-level programming language: data typing, standard procedures and functions, subprograms and parameters, control structures, and I/O, program structures, correctness, verification, testing, modification, maintenance. NOTE: Computer Science majors may not use COMP 4002 to fulfill degree requirements. Credit for either COMP 1900 or COMP 2010 precludes credit for COMP 4002. PREREQUISITE: MATH 1321.

4003-6003. Computer Organization and Assembly Language Programming. (3). Binary signals, combinational and sequential logic networks; computer structure, memory, control, processing, and I/O units; instruction types and execution. Computer machine language: symbolic coding and assembly systems: design, coding, testing, tracing, and debugging. NOTE: Computer Science majors may not use COMP 4003 to fulfill degree requirements. Credit for either COMP 3230 or COMP 3420 precludes credit for COMP 4003. PREREQUISITE: COMP 4002.

4030-6030. Introduction to Algorithms. (3). Abstract data types. Asymptotic behavior of programs. Basic paradigms in algorithm design: greedy, divide-and-conquer, dynamic programming, and graph traversal. String matching. "Garbage collection" and compaction. PREREQUISITE: COMP 2150.

4040-6040. Programming Languages. (3). (MATH 4769) Comparative features, syntax, and applicability of high-level programming languages such as FORTRAN, COBOL, PASCAL, SNOBOL, LISP, ADA, C, AND FORTH, data types, and data structures, control structures and dataflow, procedures, recursion, runtime environment, string manipulation, list processing, array processing, documentation, programming style. PREREQUISITE: COMP 2150.

4041-6041. Introduction to Compilers. (3). Finite state recognizers, lexical scanners, symbol tables, context-free languages and pushdown automata, context-free parsing methods such as recursive descent, LL(K), precedence, LR(K), SLR(K); language translation, generation and improvement of machine independent codes, inherited and synthesized attributes, syntax-directed translationschema. PREREQUISITES: COMP 3230, 4040, 4030.

4081-6081. Software Development. (3-6). Program design methodologies: formal methods, dataflow diagrams, strength and coupling measures; programmer teams, organization, and management, scheduling and estimating, walk-throughs, program libraries and documentation; organization, management and development of a large-scale software project. May be repeated for a maximum of 6 hours. PREREQUISITES: COMP 4040, 4030.

4242-6242. Introduction to Computer Graphics. (3). Characteristics of graphics I/O devices; 2D pictures, scaling, translation, rotation, and windowing; drawing histograms, simple maps, block diagrams, and

flowcharts; curved lines, precision, quantization, and interpolation, plotting equations; 3D pictures, scaling, translation, rotation, and projections hidden line problem, non-Euclidean geometry, animation. PREREQUISITES: COMP 3420.

4270-6270. Introduction to Operating Systems. (3). Hierarchy of storage devices, I/O buffering, interrupts, channels; multiprogramming, processor and job scheduling, memory management: paging, segmentation, and virtual memory; management of asynchronous processes; interrupt procedure calls, process stateword and automatic switch instructions, semaphores, concurrency; security and recovery procedures. PREREQUISITES: COMP 3230, 3420, 4040, 4030.

4601-6601. Introduction to Computability. (3). Models of sequential computation; normal forms; the Chomsky hierarchy; effective procedures and Church's thesis; reducibilities; a sample of recursively unsolvable algorithmic problems; efficient computation; some models of parallel computation. PREREQUISITE: MATH 2701, 4701, or permission of instructor.

4711-6711. Introduction to Mathematical Logic. (3). (Same as MATH 4711). Propositional logic and truth table algorithms; first order calculus; terms, formulas, sentences, models, satisfaction, truth and logical validity; proof procedures and natural deduction; completeness and incompleteness theorems; applications to artificial intelligence; computer theorem proving, and verification of computer programs. PREREQUISITES: MATH 2701 or MATH 4701 or PHIL 3621 or permission of instructor.

4720-6720. Introduction to Artificial Intelligence Programming. (3). Fundamentals of programming in LISP. Central ideas of artificial intelligence, including matching, goal reduction, constraint exploitation, search, and problem solving. PREREQUISITE: COMP 4040 or permission of instructor.

4730-6730. Expert Systems Programming. (3). Fundamentals of programming PROLOG, including data structures, backtracking, the cut, i/o, predicates, and debugging, central ideas of expert system development including knowledge representation (rules, semantic nets, frames) control structures, tools, and knowledge acquisition. PREREQUISITES: MATH 2701 and COMP 4030 or permission of instructor.

4901-6901. Individual Studies in Computer Science. (1-3). (MATH 4791) Directed individual study of selected areas of computer science. May be repeated by permission for a maximum of 6 hours. PREREQUISITE: permission of instructor.

4990-99-6990-99. Topics in Computer Science. (1-3). Topics are varied and announced in *Schedule of Classes*. PREREQUISITE: permission of instructor.

PHILOSOPHY

NANCY D. SIMCO, Chair
Room 327, Clement Humanities Building

E330 PHILOSOPHY (PHIL)

1101. Classical Issues in Philosophy. (3). (1111). Introduction to philosophical thought focused on emergence of philosophical inquiry in Classical period; examines influence of classical philosophical issues on science, religion and society, and their relevance to modern culture. [G].

1102. Values and the Modern World. (3). Discussion of nature of value, development of traditional values in East and West, criticisms of traditional values and comparative assessment of most widely accepted value philosophies of modern world. [G].

1611. Elementary Logic. (3). Introduction to formal and informal reasoning that emphasizes logic as practical method for problem solving. PREREQUISITE: Two units of high school algebra or one unit algebra and one unit geometry.

3001. Foundations of Western Philosophy: Classical Period. (3). Introduction to history of philosophy from 7th century B. C. through early Middle Ages structured around major themes that shaped classical period; attention to cultural and historical settings in which they arose and to which they contributed. Readings from philosophical and nonphilosophical sources. PREREQUISITES: PHIL 1101 or 1102, or permission of instructor.

3002. Foundations of Western Philosophy: Modern Period. (3). Introduction to history of philosophy from late Middle Ages through 19th century structured around major themes that shaped the modern period; attention to cultural and historical setting in which they arose and to which they contributed. Readings from philosophical and nonphilosophical sources. NOTE: While this is a continuation of PHIL 3001, it may be taken separately. PREREQUISITES: PHIL 1101 or 1102, or permission of instructor.

3402. American Philosophy. (3). Development of philosophy in America.

3411. Contemporary Moral Problems. (3). Such important contemporary moral issues as pornography and obscenity, capital punishment, abortion, human rights, "reverse discrimination," and civil disobedience. Underlying philosophical ideas for each issue considered and discussed.

3451. Existentialism. (3). Historical and comparative study of different existentialist writers and their relation to literature, religion, and psychology. Readings from such writers as Kierkegaard, Nietzsche, Jaspers, Heidegger, Sartre, and Camus.

3511. Ethics. (3). Critical analysis of classical ethical theories and their application to problems of individual and society. PREREQUISITES: PHIL 1101, 1102, or permission of instructor.

3512. Science, Technology and Human Values. (3). Ethical problems growing out of development of modern science and technology; of such issues as relation of science to society, dehumanization of individual, impact of technology on environment, modern warfare, etc. Specific content of course varies each semester.

3514. Biomedical Ethics. (3). Discussion of ethical problems raised by contemporary medical practices and biological innovations from standpoint of contemporary ethical theories including abortion, euthanasia, behavior modification, human experimentation and genetic engineering.

3621. Intermediate Logic. (3). Symbolic logic, including propositional calculus, lower functional calculus, and related topics. PREREQUISITE: PHIL 1611 or permission of instructor. [C].

3662. Philosophy of Science. (3). Basic features of science. Detailed analysis of problems of scientific procedure, theory construction, and verification both in physical and social sciences. PREREQUISITES: PHIL 1611 or permission of instructor.

3671. Aesthetics. (3). Introduction to philosophical theories and assumptions concerning nature and role of art and possibility of aesthetic evaluation.

3701. God and Man. (3). Major religious movements of Western world with regard to their origin, doctrines and philosophical significance. Attention to contrasting conceptions of natural and supernatural and role of religion in man's understanding of himself and his society.

3711. Philosophy of Religion. (3). Philosophical issues raised by religious experience including classical and contemporary arguments for and against existence of God, meaningfulness of religious language, and concepts of faith, evil and immortality. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

3721. Oriental Philosophy. (3). Philosophies of India, China, and Japan, with readings from primary sources of Hinduism, Jainism, Buddhism, Confucianism, Taoism, and Shintoism.

3771. Philosophy in Literature. (3). Expression of philosophical ideas in literature. Readings from philosophers, playwrights, novelists and poets.

3880. Problems in Philosophy. (3). An intensive study of selected philosophical problems. May be repeated for up to 6 hours credit. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4211-6211. History of Ancient Philosophy. (3). (3211). Selected readings from primary sources, supplemented by commentary from antiquity and modern scholarship, including Pre-Socratics, Plato, Aristotle, and Hellenistic period. PREREQUISITE: PHIL 3001 or permission of instructor.

4311-6311. History of Modern Philosophy. (3). (3311). Critical survey of major philosophers of 17th and 18th century with special attention to metaphysical and epistemological issues that divided Rationalism and Empiricism. Readings from Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, and Kant. PREREQUISITE: PHIL 3002 or permission of instructor

4422-6422. Recent Anglo American Philosophy. (3). Major developments in philosophy in England and United States from 1900 to present; reading from such philosophers as Russell, Moore, Ayer, Wittgenstein, James, Dewey, Lewis, Quine and other contemporary authors. PREREQUISITE: PHIL 3002 or 4311 or permission of instructor.

4440-6440. Philosophy of the Nineteenth Century. (3). (3372). Extensive reading in representative 19th century philosophers from Fichte to Nietzsche; attention to German Idealism (especially Hegel) and reaction against it (left and right wing Hegelianism, Marx, Kierkegaard, Nietzsche) as well as utilitarianism, Darwinism, and rise of positivism. PREREQUISITE: PHIL 3002 or 4311 or permission of instructor.

4441-6441. Recent Continental Philosophy. (3). Major figures in 20th Century European Thought. Such movements as phenomenology, existentialism, structuralism and hermeneutics.

4531-6531. Philosophy of Law. (3). Introduction to theories of legal reasoning and basic principles of jurisprudence. For pre-law students and others pursuing law related careers. Topics include concept of law, legal realism, stare decisis, equity jurisprudence, and civil disobedience. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4551-6551. Social and Political Philosophy. (3). (3351). Major philosophical theories of man and the state; emphasis on concepts of society, culture, institutions, government, law, power, authority, rights, and obligation. Selected readings. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4552-6552. Marx. (3). Critical study of philosophy of Karl Marx, including the *Manifesto*, *Capital* and subsequent philosophical and historical developments.

4632-6632. Advanced Logic. (3). Nature of axiomatic systems, techniques of formalization, and logical foundations of mathematics. PREREQUISITE: PHIL 3621 or permission of instructor.

4642-6642. Philosophy of Psychology. (3). Examination of philosophical issues in the foundations of behavioral sciences, such as, free will and determinism, the use of mental concepts in the behavioral sciences and explanation in behavioral and natural sciences. PREREQUISITE: PHIL 1101 or 1102, or one course in psychology, or permission of instructor.

4662-6662. Philosophy of the Social Sciences. (3). Consideration of the scientific character peculiar to social (rather than natural) sciences by virtue of their special subject-matter, human beings and society. Topics such as meaning, understanding vs. explanation, rationality and the nature of social institutions. Selected readings. PREREQUISITE: PHIL 1101 or 1102, or permission of instructor.

4801-09-6301-09. Special Topics in Philosophy. (3). Epistemology, metaphysics, philosophy of language, philosophy of mind, logical theory, and axiology. Area to be covered appears in *Schedule of Classes* semester it is taught. May be repeated for maximum of 15 hours credit without changing an earlier grade if different areas are treated. PREREQUISITE: two courses in philosophy or permission of instructor.

4891. Senior Honors Thesis. (3). Directed reading and research culminating in a Senior Thesis. Thesis topic to be selected by student with approval of thesis director before honors students in philosophy. May be repeated in successive semesters for up to 6 hours credit.

4994. Reading and Research. (3). Individual directed study in area of special interest. May be repeated in successive semesters for up to 6 hours credit.

PHYSICS

PROFESSOR

DONALD R. FRANCESCHETTI, Chair
Room 216, Manning Hall

The PHYS 1101-1102 sequence is recommended for students with no previous background in physics. Physics 2111 and 2112 require knowledge of trigonometry (MATH 1212 or equivalent). Physics 2511 and 2512 require knowledge of calculus (MATH 1321 or equivalent).

Physics 2511 and 2512 are required of all students in engineering curricula, strongly recommended for all majors in physics, chemistry or mathematics, and recommended for majors in biology or geology. Students preparing for medical, dental, or pharmacy school, and students preparing to teach science in secondary school must complete either Physics 2511 and 2512 or Physics 2111 and 2112 to meet professional school or state teacher licensure requirements. Physics 2111 and 2112 are required for majors in Engineering Technology.

E350 PHYSICS (PHYS)

1101. Introductory Physics. (4). Phenomenological introduction to physics for non-technical students, providing an understanding of natural laws of motion, structure of matter, heat, sound, electromagnetics, light, atomic and nuclear physics. *Three lecture, two laboratory hours per week.* NOTE: Credit will not apply toward major or minor in the sciences, nor will it satisfy any part of science requirements in pre-professional curricula. [G].

1102. Survey of Astronomy. (4). Motions of earth and moon; apparent motions of stars and planets; orbits and properties of bodies in the solar system; stellar distances, properties, and evolution; our galaxy and others. *Three lecture, two laboratory hours per week.* PREREQUISITE: PHYS 1101. [G].

2111. General Physics. (4). Mechanics, heat, and sound. *Three lecture, two laboratory hours per week.* PREREQUISITE: MATH 1212.

2112. General Physics. (4). Continuation of PHYS 2111; includes magnetism, electricity, light, and modern physics. *Three lecture, two laboratory hours per week.* PREREQUISITE: PHYS 2111.

2511. Physics for Science and Engineering. (4). Treatment of mechanics, heat and sound, using methods of calculus. *Three lecture, two laboratory hours per week.* PREREQUISITE: MATH 1321. [G].

2512. Physics for Science and Engineering. (4). Continuation of PHYS 2511. Treatment of electromagnetism, optics, atomic and nuclear physics, using methods of calculus. *Three lecture, two laboratory hours per week.* PREREQUISITE: PHYS 2511. [G].

3010. Introduction to Modern Physics. (3). Principles of relativity, quantum mechanics and atomic physics; selected topics in solid state, nuclear, and molecular physics. *Three lecture hours per week.* PREREQUISITE: PHYS 2512.

3011. Theoretical Physics. (3). (4810). Special mathematical techniques in solution of physical problems. Emphasis on vector calculus, boundary value problems, eigenvalue problems, and Fourier series. *Three lecture hours per week.* PREREQUISITE: PHYS 2512.

3012. Theoretical Physics. (3). Continuation of PHYS 3011 covering complex variables, partial differential equations and special functions of physics. *Three lecture hours per week.* PREREQUISITE: PHYS 3011.

3111. Mechanics. (3). Advanced classical mechanics; includes statistics, dynamics of particles, rigid bodies, fluid flow, work, energy, momentum, force fields, and harmonic motion. *Three lecture hours per week.* PREREQUISITE: PHYS 2512, MATH 3391.

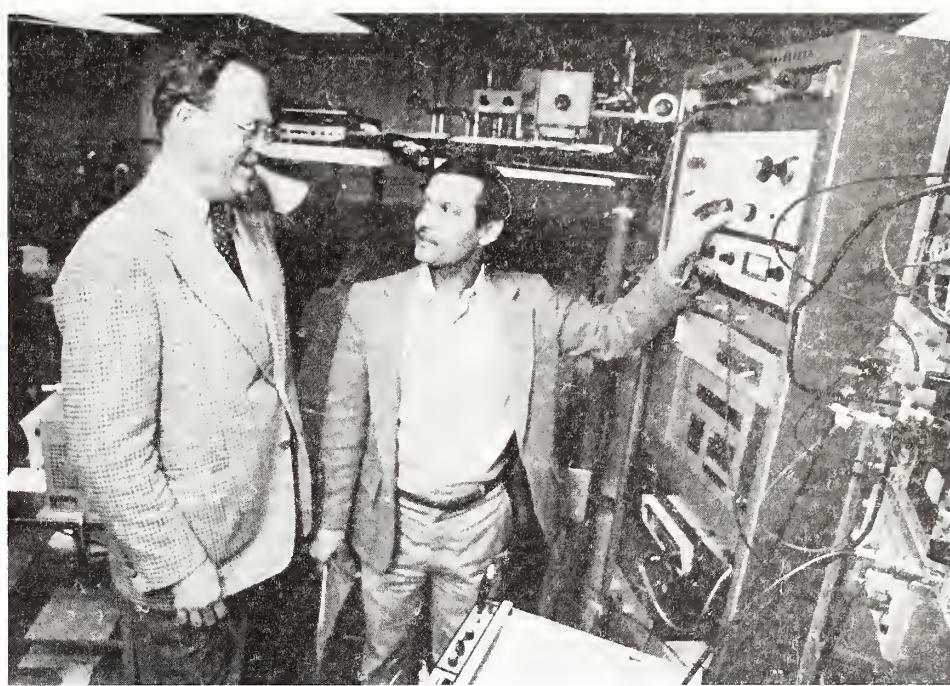
3112. Mechanics. (3). Continuation of PHYS 3111. *Three lecture hours per week.* PREREQUISITE: PHYS 3111.

3211. Electricity and Magnetism. (3). Electromagnetic fields and waves, including such topics as dielectrics, induced electromotive force, magnetic energy, magnetic materials, Maxwell's equations, and reflection and refraction. *Three lecture hours per week.* PREREQUISITE: PHYS 2512, MATH 3391.

3212. Electricity and Magnetism. (3). Continuation of PHYS 3211. *Three lecture hours per week.* PREREQUISITE: PHYS 3211.

3510. Electronics. (4). Theory and application of electronic devices; emphasis on scientific instrumentation. Laboratory oriented course including basic semiconductors, integrated circuits, and microprocessors. *Three lecture, three laboratory hours per week.* PREREQUISITE: PHYS 2512 or 2112 or equivalent.

3610. Experimental Techniques. (1). Introduction to independent experimentation including shop practices, glass blowing, and preparation of experimental data for computers. Some experiments of traditional nature



related to physics courses. *Three laboratory hours per week.* PREREQUISITE: PHYS 2512.

3611. Experimental Techniques. (1). Continuation of PHYS 3610. *Three laboratory hours per week.*

3720. Intelligent Systems-Human and Machine. (3). (Same as COMP 3720). Intelligence and artificial intelligence, the brain, the computer, limits of computation, knowledge representation, deductive and inductive reasoning, problem solving and theorem proving, learning, language, and communications, expert systems, vision, machine vision, connectionist models. PREREQUISITES: MATH 1321 or 2701, and programming experience in some high level computer language.

4000-09-6000-09. Special Topics in Physics. (3). Selected topics of current interest in physics not otherwise included in the curriculum. *Three lecture hours or equivalent laboratory hours per week.* PREREQUISITE: Permission of instructor.

4021. Applied Radiation Physics. (3). Applied radiation and radioactivity. Includes types of radiation, radiation measurement, interaction with matter, and biological effects. Radiation safety aspects emphasized. *Three lecture hours per week.* PREREQUISITE: PHYS 2112 or 2512 and MATH 1321.

4040. Medical Physics. (3). Physics of sensory, respiratory, and circulatory systems; physical basis of radiology and nuclear medicine. *Three lecture hours per week.* PREREQUISITE: PHYS 2112 or 2512, and college level course in physiology.

4051-6051. Astrophysics. (3). Application of radiation laws to interpretation of stellar structure. Introduction to radiative transfer in atmospheres. Spectral and luminosity classification of stars. Stellar populations and evolution. *Three lecture hours per week.* PREREQUISITE: PHYS 2512, PHYS 3010 is recommended.

4110-6110. Nuclear Physics. (3). Properties of atomic nuclei, radioactive transients, alpha, beta, and gamma decay. Binding energy, nuclear forces and nuclear models. *Three lecture hours per week.* PREREQUISITE: PHYS 2512, PHYS 3010 is recommended.

4211-6211. Optics. (3). Brief review of geometrical optics; concentration on wave optics. Includes polarization phenomena, interference, diffraction, coherence, holography, and scattering. *Three lecture hours per week.* PREREQUISITE: PHYS 3211 or equivalent.

4410-6410. Introduction to Quantum Theory. (3). Experimental basis of quantum theory; development of Schrodinger equation and its solution of simple systems; selected applications in atomic and molecular structure. *Three lecture hours per week.* PREREQUISITE: PHYS 3111, 3211 or equivalent.

4510-6510. Thermodynamics. (3). Mathematical treatment of thermodynamics, including such topics as work, energy, enthalpy, entropy, reversible and irreversible processes, equilibria, specific heats, and phase transitions. *Three lecture hours per week.* PREREQUISITE: PHYS 2512, MATH 3391.

4610-6610. Solid State Physics. (3). Such topics as lattice vibrations, specific heats, electrical and thermal conductors in solids, magnetism. *Three lecture hours per week.* PREREQUISITE: PHYS 3010 or equivalent.

4910. Seminar. (1). Special projects, reports and investigation of current literature and research. May be repeated for maximum of 2 semester hours credit. PREREQUISITE: permission of instructor. (S/U).

4990. Research in Physics. (1-4). Collaboration with faculty member on problem of mutual interest. *Two to eight laboratory or equivalent hours per week.* May be repeated for maximum of four hours credit. PREREQUISITE: PHYS 3010 and permission of instructor. Students expected to complete prospectus in collaboration with faculty member before registering.

POLITICAL SCIENCE

ASSOCIATE PROFESSOR

JAMES D. KING, Chair

Room 427, Clement Humanities Building

The political science areas of study are indicated by the second digit of the course number: General 1, American Government and Public Law 2, Comparative Government 3, Political Theory 4, International Relations 5, Public Administration 6, and Special 7 and 8.

The prerequisite for all 3000 and 4000 level courses is either junior standing or the permission of the instructor.

The use of a computer for instruction may be a component of courses offered in political science. However, no computer competence will be assumed unless specified in the course description.

Admission to POLS 3610, 3611, 3612, 3613, 3614, and 3615 is restricted to students seeking the Bachelor of Professional Studies degree in Fire Administration or Fire Prevention Technology through the University College.

E370 POLITICAL SCIENCE (POLS)

1100. American Government. (3). (2211). Development, structure, and processes of American system of

government, including framing principles of U.S. Constitution and Bill of Rights; structure and roles of President, Congress, and Supreme Court; and citizen participation in governing. [G].

3101. Introduction to Ancient Political Thought. (3). Inquiry into fundamental questions of ancient political thought, such as: Who should rule? What is justice? What is a good political order? What are the duties of citizens? What is the foundation of morality? [G].

3102. Introduction to Modern Political Thought. (3). Inquiry into fundamental questions of modern political thought, such as origin of political society, proper rights of citizens, legitimate purposes of government, meaning of justice and good society. [G].

3201. Comparative Politics. (3). Comparison of institutions, issues, processes and policies in a variety of political system ranging from European to Asian or African countries. [G].

3201. International Relations. (3). Consideration of all major forms of political interaction (conflict, competition, and cooperation) between and among global actors in world arena. [G].

3100. Political Inquiry. (3). Research process in political science; emphasizes skills common to all subfields of political science—familiarity with sources of data and documents, research design and general analytic skills.

3102. Religion and Politics. (3). Survey of role of religion and religious belief in politics. Emphasizes role of religious institutions in international arena and national politics and effects of religion on behavior and political beliefs

3211. State and Local Governments. (3). Role of state governments in Federal System, political institutions, elections; organization, functions, and problems of state government; emphasis on Tennessee government.

3213. Introduction to the Study of Public Policy. (3). Public policy formulation process and some of the major substantive areas of policy concern in America. Emphasis on framework for identifying and analyzing substance of public problems, policy making, and policy administration.

3216. Political Parties and Elections. (3). Political parties and elections in the American political system; emphasis on party organization and activities, campaign strategies and techniques, voting behavior, and two-party system.

3224. Urban Politics. (3). Functions and role of government in urban America in context of urban politics and social, economic, and governmental problems of cities and suburbs.

3302. Western European Government and Politics. (3). Comparative study of selected political systems of Western European States.

3304. African Politics. (3). Comparative study of politics in Africa. Emphasis on current problems, with attention to historical, political, and socioeconomic dimensions.

3306. Latin American Government and Politics. (3). Forms of organization, functions and operations of government in Latin America. Emphasis on development of political institutions and present day trends.

3309. Government and Politics of Middle East. (3). Analysis of organization and functions of governments in area dominated by tenets of Islam, including examination of origin and development of Arab-Israeli conflict.

3401. Legal/Political Thought: Classical. (3). Question of justice and its relation to law and politics. Emphasizes confrontation between classical and modern views

3402. Legal/Political Thought: Modern. (3). Question of justice and its relation to law and politics. Emphasizes confrontation between early and recent modernity.

3405. Introduction to Law and Jurisprudence. (3). Sources, functions, and processes of law.

3505. International Organizations. (3). Role of international organizations in international relations. Special attention to League of Nations and United Nations.

3506. American Foreign Policy. (3). Domestic sources, implementation, and content of U.S. foreign policy.

3507. Political Violence. (3). Consideration of processes that lead to war, revolution, intervention, and terrorism as well as their effects.

3508. American National Security Policies. (3). Institutions, organizations, and policies charged with maintenance of peace and security; issues, problems, and paradoxes underlying current national security policies; arms-control proposals and objectives; political and ethical dilemmas caused by nuclear strategies and desire to avoid nuclear war.

3601. Public Administration. (3). Concepts and practices of organization and management in executive departments, national, state, and local; analysis of bureaucracy, administrative theory, budgeting, personnel, and administrative leadership.

3610. Personnel Management for the Fire Service. (3). Personnel practices and management procedures. Included are manpower planning, labor relations, recruitment, selection, testing, performance appraisals, classification, motivation, politics, and management. PREREQUISITE: admission restricted to students seeking BPS degree in Fire Administration or Fire Prevention Technology.

3611. Disaster and Fire Defense Planning. (3). Concepts and principles of community risk assessment, regional and cooperative procedures and plans, relationship of structural, climatic, and topographical variables to group fires, conflagrations, and natural disasters, pre and post occurrence factors, communications, planning, organizing, coordination, command and logistics. PREREQUISITE: admission restricted to students seeking BPS degree in Fire Administration or Fire Prevention Technology.

3612. Fire Prevention Organization and Management. (3). Examines and evaluates techniques, procedures, programs and agencies involved with fire prevention. Includes public and private fire prevention functions, licenses, permits, zoning, legal aspects, inspection, investigations, planning, arson and incendiary analysis. PREREQUISITE: admission restricted to students seeking BPS degree in Fire Administration or Fire Prevention Technology.

3613. Advanced Fire Administration. (3). Overview of organization and management in modern fire service. Includes management of equipment and personnel, fire department functions, planning, resource development, labor relations. PREREQUISITE: admission restricted to students seeking BPS degree in Fire Administration or Fire Prevention Technology.

3614. Political and Legal Foundations of Fire Protection. (3). Legal basis for police power of government related to public safety. Legal limitations and responsibility. Liability of fire prevention organizations and personnel. Review of judicial decisions. Implications of product liability cases in fire prevention. PREREQUISITE: admission restricted to students seeking BPS degree in Fire Administration or Fire Prevention Technology.

3615. The Community and The Fire Threat. (3). The sociological, economic and political characteristics of communities and their influence on the fire problem. How to study community profiles and structures with consideration of the economic, geographic, and sociological variables of the fire threat. Examination of functional basis of the community, diverse social roles of community agencies, and study of fire services as a complex organization in community. PREREQUISITE: admission restricted to students seeking BPS degree in Fire Administration or Fire Prevention Technology.

3700-09. Special Topics in Contemporary Politics. (3). Topics of contemporary significance in politics. May be repeated for maximum of 6 hours credit.

4101-6101. Political Statistics. (3). Introduction to analysis of quantitative data used to test hypotheses in fields of political science and public administration, including both parametric and nonparametric techniques. Particular attention to alternative measures of association and significance, regression, factor analysis, path analysis, and causal meeting.

4211-6211. Constitutional Law: National Powers. (3). Relationships and controls of three branches and nature of division of power between nation and states; emphasis on role of Supreme Court as arbiter in constitutional system. [W].

4212-6212. Constitutional Law: The Origins and Evolution of Civil Liberties in the United States. (3). Background, role, and legitimate extent of civil rights and liberties in the United States. [G].

4213-6213. Public Policy. (3). Selected public policy issues and politics in policy making process.

4214-6214. The Presidency and Executive Decisionmaking. (3). The structure role of the President in American political system. Attention to growth of Presidency, presidential elections, executive decision-making process, and limitations on presidential power.

4215-6215. Constitutional Policies and The Judicial Process. (3). Limits of political resources and power of judiciary. Primary attention to extent to which United States Supreme Court able to obtain compliance with its decisions on highly politicized and controversial questions of public policy; Court in conflict with other branches of the national government, the state governments, and public opinion.

4216-6216. Interest Groups in American Politics. (3). Role and impact of interest groups within American political system, including group theory, tactics, and group relationships with various governmental institutions.

4217-6217. The Legislative Process. (3). Origins, organization, functions, and activities of U.S. Congress and American state legislatures.

4221-6221. Urban Administration. (3). Politics, administration, and public policy in urban context. Focus on administrative aspects of selected governmental policy-making processes; interrelationships of governments at various levels; urban challenges facing modern public administrators.

4224-6224. Urban Problems. (3). Selected problems in urban administration, politics, and policies.

4230-6230. Legislative Internship. (3-12). Supervised internship working with Tennessee General Assembly or other legislative bodies on current legislative programs. Seminar sessions to discuss and analyze problems with which interns working. May be repeated for total of 12 credits. (S/U for certain sections). PREREQUISITE: Permission of department.

4231. Administrative Internship. (3-12). Supervised internship working with administrative branches of national, state, or local governments. Seminar sessions to discuss and analyze problems with which interns are working. May be repeated for total of 12 credits. PREREQUISITE: permission of department.

4305-6305. Soviet Government and Politics. (3). Organization and functions of authoritarian state; emphasis on role of Communist Party and ideology.

4307-6307. Government and Politics of Communist China. (3). Institutions of government, political process, political elites, political groups and political socialization in Communist China.

4399-6399. Research and Studies Abroad. (1-6). Supervised field research and studies in selected foreign countries. May be repeated up to six hours. PREREQUISITE: Permission of the department.

4401-6401. Modern Political Ideologies. (3). Major ideologies affecting modern politics. Includes ideologies of democracy, communism, and facism as well as capitalism and socialism, racism, and nationalism, and ideologies of developing or "third" and "fourth world" nations.

4405-6405. Origin and Development of American Political Thought. (3). Origin and development of political thought in United States from colonial to present time; emphasis on relation between political thought and political institutions and practices. [G].

4408-6408. Studies in Political Theory. (3). Special issues in political theory. May be repeated for a maximum 6 hours credit with permission of instructor.

4409-6409. Marxism and Politics. (3). Impact of Marxism on political ideas, practices and movements throughout the world.

4420-6420. Political Thought and the Classics: Ancient. (3). Close reading of classical ancient texts with view to their position in great tradition of political theory.

4421-6421. Political Thought and the Classics: Modern. (3). Close reading of classical modern texts with view to their position in great tradition of political theory.

4501-6501. Contemporary Problems In International Relations. (3). Studies or problems in area of world politics. May be repeated for maximum of 6 hours credit with permission of instructor.

4502-6502. Soviet Foreign Policy. (3). Basic concepts of Soviet foreign policy; development and

techniques; present patterns of Soviet relations with key nations; major problems in future relationships.

4504-6504. International Law. (3). Nature, scope, duties, rights, and evolutionary trends of international law.

4505-6505. Comparative Communist Systems. (3). Cross-national comparison of adaption of ruling and non-ruling communist parties to different political environments. Includes examination of inter-party and intra-block relations.

4506-6506. Problems of American Foreign Policy. (3). Studies or problems of American foreign policy. May be repeated for a maximum 6 credit hours with permission of instructor.

4508-6508. Theories and Concepts in International Relations. (3). Theoretical approaches to study of international politics. Consideration of various schools of thought, methods, and substantive literatures.

4510-6510. International Political Economy. (3). Consideration of manner in which political processes affect and are affected by economic processes at global level.

4602. Public Finance Administration. (3). Detailed study of administrative and political problems of fiscal policy, budgetary process, and fiscal controls.

4603. Public Personnel Administration. (3). Policies, methods and techniques utilized in public personnel administration. Attention to problems reflecting contemporary demands upon personnel organizations. Capacity to analyze problems, select most effective means of dealing with them, and plan appropriate courses of action through case example.

4605-6605. Program and Policy Evaluation. (3). Models, theories and techniques of program and policy evaluation in public administration. Includes evaluation research design, data collection and analysis, dissemination of results, possible applications of evaluations to policy making and administration, and organizational and political contexts of evaluation.

4611. Administrative Law. (3). Role and nature of administrative law, including procedural requirements and judicial review of administrative actions and liability of government for torts and breach of contract.

4702. Independent Study. (1-3). Independent investigation of research problem or directed reading in selected area of political science under tutorial supervision of member of political science faculty. PREREQUISITE: Permission of chairman.

4710-19-6710-19. Special Topics in Political Science. (3). Intensive study of selected topics in political science. May be repeated for maximum of 6 hours credit.

PSYCHOLOGY

PROFESSOR

FRANK C. LEEMING, Chair

Room 202, Psychology Building

PSYC 1101 or 1102 is prerequisite for all other courses in the Department of Psychology except 2201; both 1101 and 1102 are required of Psychology majors.

E390 PSYCHOLOGY (PSYC)

1101. General Psychology I. (3). Introduction to social aspects of psychology as a science of behavior. Topics include: personality, emotion, abnormal behavior, treatment of psychological disorders, social and developmental psychology, psychological testing and applied psychology. [G].

1102. General Psychology II. (3). Introduction to the biological aspects of psychology as a science of behavior. Areas of study include learning, sensation and perception, physiological and comparative psychology, and psychopharmacology.

2201. Deviance: Its Role In History and Culture. (3). Introduction to concept of deviance from prehistory to present. Emphasis on vilification and glorification of deviant behavior according to time, place and customs. [G].

3001. Psychological Statistics. (4). (2301). Introduction to use of statistics in psychology, with emphasis

on elementary theory of measurement and computation. Topics include measures of central tendency and variability, tests of significance, correlation procedures, and an introduction to multivariate analyses, analysis of variance, and nonparametric procedures. *Three lecture, two laboratory hours per week. [C].*

3002. Introduction to Psychological Research. (4). (2302). Survey of logical and methodological considerations common to all research and an overview of the range of observation, measurement and laboratory procedures employed, and presentations of their own research by various members of the faculty. *Three lecture, two laboratory hours per week. PREREQUISITE: PSYC 3001. [W].*

3101. Psychology of Personality. (3). Introduction to development and functioning of normal person. Variety of representative theoretical orientations examined; emphasis on psychoanalytic theories and other 20th century theoretical viewpoints.

3102. Abnormal Psychology. (3). Basic concepts of psychopathology with emphasis on the development of behavior deviations, description of various neurotic and psychotic reactions, and an introduction to methods of psychotherapy.

3103. Child Psychology. (3). Patterns of cognitive, interpersonal, and behavioral development from birth through early adolescence. Psychological effects of genetic, organic and environmental influences as the child matures.

3104. Adult Psychology. (3). Patterns of cognitive, interpersonal and behavioral development from late adolescence to old age. The theoretical and empirical literature pertaining to such topics as marital and vocational choices, parenting, the midlife crises, and death.

3106. Social Psychology. (3). (3302). Analysis of the behavior and experience of individuals in group settings, examining such topics as leadership, social influence, and inter-group and intragroup relations.

3107. Child Psychopathology. (3). Introduction to major theoretical formulations of childhood disorders, including learning, developmental, psychoanalytic and family systems theories. Emphasis on basic research that contributes to understanding of difficulties such as learning disabilities, mental retardation, childhood autism, hyperactivity, and juvenile delinquency.

3303. Thinking and Cognitive Processes. (3). Analysis of the development and modification of thinking, reasoning, conceptualization, language processes in the individual.

3304. Perceptual Psychology. (3). (4203). Introduction to empirical and theoretical issues in perception. Emphasis on classical and contemporary issues and approaches to perception pertaining to how information from environment is transformed, organized, represented and used by the perceiver in adapting to physical world.

3305. Learning and Memory. (3). (4204). Survey and analysis of the basic processes involved in acquisition and retention of new behaviors and alteration of existing behaviors in animals and humans. Examination of some central theoretical concepts and issues in learning.

3306. Physiological Psychology. (3). (4201). Survey of physiological processes underlying sensation, perception, motivation and emotion, motor systems, unlearned and learned behavior patterns, memory and other psychological functions.

3307. Animal Behavior. (3). (4202). Synthesis of comparative psychological and ethological approaches to study of animal behavior. Such topics as behavior genetics, species specific behaviors, behavior as a basis for phyletic classification, major behavioral dimensions related to phylogenesis, etc.

3506. Human Sexuality. (3). (3105). A survey of existing knowledge of human sexual behavior, including physiological, anatomical, psychological and cultural components. Focuses primarily on normative sexual functioning; such topics as sexual deviation, sexual dysfunctions, and types of treatment are also considered. PREREQUISITES: PSYC 1101 and 1102.

3507. Alcohol, Drugs and Behavior. (3). Survey of major drugs of abuse, their mode of action, and their behavioral effects, both acute and chronic. Major theories of etiology and maintenance of drug abuse, and review of prominent strategies for prevention, intervention and treatment.

3508. Industrial and Organizational Psychology. (3). (3301). Application of psychological concepts and

methods to phenomena in industrial and organizational settings, with emphasis on personnel selection, classification and evaluation, employee attitudes, morale and motivation, and psychological analysis of the condition of work.

4010-19. Special Topics in Psychology. (1-3). Topics varied and announced in *Schedule of Classes*.

4101. History of Psychology. (3). Comprehensive survey and critical analysis of the philosophical and scientific antecedents of contemporary psychology. PREREQUISITE: 10 upper division hours in psychology.

4503. Special Problems in Psychology. (1-3). Student, under faculty supervision, may (a) read intensively in specialized area, (b) conduct psychological research and/or (c) obtain field experience in community institutions where psychological principles are applied. 4503 and 4504 may be taken for a combined total of 9 hours, no more than 6 of which may be with the same faculty member. PREREQUISITE: permission of the department. (S/U)

4504. Directed Research. (3). Majors receive first hand research experience under tutelage of individual faculty member. Students may work individually or in small groups depending upon project. Projects conform to set of guidelines available from department. NOTE: PSYC 4503 and 4504 may be repeated for a combined total of up to 9 hours, 6 with any one faculty member. PREREQUISITE: permission of department. (S/U)

SOCIOLOGY AND SOCIAL WORK

PROFESSOR REBECCA F. GUY, Chair
Room 231, Clement Humanities Building

PROFESSOR MORRIS D. KLASS, Director
Division of Social Work
Room 229, Clement Humanities Building

Sociology 1111 is a prerequisite for all other courses in sociology except 2100 and 2101.

E410 SOCIOLOGY (SOCI)

1111. Introductory Sociology. (3). Introduction to concepts and methods of sociology. Emphasis on social differentiation (race, gender, age) and social stratification in study of such social institutions as family, religion, education, law, economy, health care. [G].

1112. Contemporary Social Problems. (3). Sociological approaches to understanding contemporary social problems; magnitude, causes, consequences, and possible solutions to various problems, such as poverty, racism, sexism, problems of aging, crime, and population.

2100. Sociology of International Development. (3). Social change in an increasingly interdependent world; introduction to development theory and how relations among countries condition changes within them; cultural conflict, social inequality, education and ideology, industrialization, urbanization, multinational corporations, population problems, quality of life indicators. [G].

2101. The Family in Global Perspective. (3). (Same as HMEC 2101). Introduction to family as a primary, global, social institution. Contributions sociology, anthropology, and home economics have made to understanding how and why family systems vary worldwide and common bonds and problems facing families in modern societies. [G].

3311. Social Statistics. (3). Application of basic statistical concepts and techniques to social analysis. Description of data for single variables and for relationships between two variables. Tests of significance for relationships between two variables involving sample data. Use of packaged statistical computer programs for single and two variable analysis. [C].

3322. Methods of Social Research. (3). Overview of process of social research; selection and formulation of problem, design of research, methods of investigation, analysis and interpretation of data, and report preparation. Emphasis on data collection techniques. PREREQUISITE: SOCI 3311.

3332. Qualitative Research Methods. (3). Rationale and procedures for using qualitative research such as field work, in-depth interviews, oral histories in the social sciences; emphasis on review of representative qualitative research studies and experience in operationalizing concepts, logging data, asking questions and analyzing data.

3401. Social Inequality. (3). Unequal distribution of power, property, and prestige and social relations of dominance and subordination in the American class system; how and why this inequality develops and persists; differences in life chances and options across different social classes.

3420. Sociology of the South. (3). Political economy and major institutions in the South and implications for different races and classes. Attention to the South since World War II, including the Civil Rights movement.

3422. Racial and Ethnic Minorities: A Socio-Historical Approach. (3). Comparative study of racial and ethnic minorities in United States, how inequality is institutionalized in such areas as employment, education, political participation, and social relations; emphasis on how subordinate groups resist oppression and initiate social change. [G].

3432. Sociology of Gender Roles. (3). Traditional conceptions of masculinity and femininity and modifications of these resulting from economic, demographic and cultural changes. Socialization for masculine and feminine roles and variations in these roles throughout life cycle. Class, race, occupational and other institutional differences in sex roles.

3501. Sociology of Deviant Behavior. (3). Problems in applying definitions of deviance in everyday life; theories about causes and consequences of deviance critically reviewed; types of deviance analyzed, ranging from interpersonal violence to various forms of sexual expression.

3521. Criminology. (3). Nature and significance of criminal behavior; statistics of criminal behavior and criminals; trends in social reactions to criminal behavior and criminals. Development and nature of theories of criminal behavior. Current programs for treatment and prevention of criminal behavior.

3701. Introduction to Social Psychology. (3). Basic theory and research dealing with study of human behavior in social situations; emphasis on communication processes, socialization, social roles, social self, and interaction in group contexts.

3801. Sociology of Organizations and Bureaucracies. (3). Analysis of bureaucratic organizations in modern society and effects on individual and group behavior; benefits of industrial-technological society and costs of bureaucratization and centralization of organizational life; current issues concerning individual autonomy, organizational productivity, and control.

3820. Sociology of Education. (3). Sociological analysis of education and its functions; school and community relationships; problems of social change and educational adjustments.

3831. Marriage and the Family. (3). American family patterns, including mate-selection, man-woman relationships, marital satisfaction, parent-child communication, divorce, alternative lifestyles and other contemporary issues.

3860. Sociology of Religion. (3). Role of religion in modern society; relationship between religion and other spheres of life; sociological examination of cults, sects, churches, and religious movements; causes and consequences of religious beliefs and practices.

3940. Social Change. (3). Sociological analysis of theory, nature, meaning, and consequences of social change.

4210. Rise of Sociological Theory. (3). Nature, grounds, and explanatory powers of various forms of sociological theory; analysis of bases for scientific and philosophical assumptions and social and political contexts; major theorists including Durkheim, Marx, Weber, Simmel.

4211-6211. Contemporary Sociological Theory. (3). Major frameworks of 20th century sociological

thought, including theoretical schools of functionalism, exchange theory, critical theory, symbolic interactionism, phenomenological sociology, and ethnomethodology; current social and political trends and issues.

4312-6312. Intermediate Social Statistics. (3). Multivariate analysis of social data. Use of computer programs for data management and statistical analysis. PREREQUISITES: SOCI 3311, 3322, or equivalents, or permission of the instructor.

4340. Field Problems in Social Research. (3). Application of social science knowledge and methods to research projects in local community or region; development of individual projects according to student's concentration, or work in cooperation with social and human services agencies and other community organizations.

4420. Racial Inequality. (3). Relations of dominance and subordination in the United States. Focus on social and political experiences of African Americans, Asian American, and Latinos, especially strategies employed to resist oppression and reduce inequality.

4442. Sociology of Poverty. (3). Structural sources of inequality and how experiences of poverty are shaped by race, gender and age. [W].

4460. Black and White Women in the South. (3). How history of South and political-economic structure has shaped black and white women's work, family, community activities, and relationships; emphasis on collaboration and competition aspects, identity issues, and demographic characteristics; focus on the Memphis area. [W].

4541-6541. Sociology of Aging. (3). Ageism in sociocultural contexts; current beliefs, values, and norms regarding aging; structural location of aging in society; and implications of ageism in employment, poverty, private and institutional housing, crime, physical illness and mental illness.

4631. Cities in Change. (3). Historical transformation of urban communities; effects of urbanism on behavior; patterns of class, race and ethnic segregation in American cities; growth and decline of cities in relation to social, political, and economic forces; global patterns of urbanization: causes and consequences.

4842-6842. Sociology of Occupations and Professions. (3). Sociological analysis of division of labor, occupational groupings, career patterns, and professional associations in modern American society; meaning of work.

4851. Medical Sociology. (3). Examination of human arrangements and their human legitimations within which variations in human biology are discovered, defined, diagnosed, described, and disposed of as "disease".

4852. Sociology of Mental Illness. (3). Examination of human arrangements and their legitimations within which "incomprehensible" behavior is discovered, defined, diagnosed, described, and disposed of as "mental illness".

4900-09-6900-09. Special Topics in Sociology. (3). Special areas of sociology not otherwise included in the curriculum.

4912. Directed Individual Study. (1-6). Individually directed advanced reading and/or research in special areas of interest. NOTE: Course may be repeated for maximum of 6 hours credit. PREREQUISITE: permission of department chair.

4923. Social Institutions and the Life Cycle. (3). Analysis of social institutions from life cycle perspective; social institutions studied from perspective of their specific function for and appropriateness to specific stages of life cycle development. [W].

E470 SOCIAL WORK (SWRK)

2911. Social Response to Human Need. (3). Introduction to historical and contemporary issues related to American social welfare systems; analysis of impact on vulnerable populations, value implications, change processes, and program components.

3901. Social Work: Profession and Practice. (3). Overview of social work as profession, including

introduction to its value base, knowledge base, and skill base; roles of social workers in social service agencies. Volunteer experience required.

3902. Human Development and Social Interaction. (3). Overview of human development from birth through old age; focus on interaction of biological, psychological, and socio-cultural factors; major developmental theories, transitional phases, and variant lifestyles; relevance to social functioning and social work practice. PREREQUISITE: SWRK 2911 or 3901, or instructor's permission.

3903. Models of Social Intervention. I. (3). Overview of traditional social casework methodology; emphasis on theoretical approaches and schools of practice; beginning applications of case study model. PREREQUISITE: SWRK 2911, 3901, 3902, or director's permission.

3904. Models of Social Intervention II. (3). Continuation of SWRK 3903, with emphasis on application of theory through assessment, intervention planning, use of community resources, and functions of social workers. Extensive case analysis. PREREQUISITE: SWRK 3903.

3905. Dynamics of Professional Interviewing. (3). Models, techniques and skills in relationship building, types and styles of interviews; interaction patterns between client and social worker; observational and experiential activities, role-playing and videotape. PREREQUISITE: SWRK 3903. COREQUISITE: SWRK 3904.

3930. Introduction to Social Work Research. (3). History and methods of social work research including scientific thinking, statistical operations, and systematic approaches to acquisition of social work knowledge. PREREQUISITE: SWRK 2911.

4830. Field Instruction in Social Work I. (3). Supervised internship in social service agency or program. Minimum of 200 clock hours required. PREREQUISITE: SWRK 3904 and director's permission. COREQUISITES: SWRK 4840, SWRK 3905.

4831. Field Instruction in Social Work II. (3). Continuation of supervised internship. Minimum of 200 clock hours required. PREREQUISITE: SWRK 4830, and director's permission. COREQUISITE: SWRK 4841.

4840. Integrative Field Seminar I. (2). Integration of social work theory with field instruction experiences. PREREQUISITE: permission of Director. COREQUISITE: SWRK 4830.

4841. Integrative Field Seminar II. (2). Continuation of SWRK 4840. PREREQUISITE: permission of director. COREQUISITE: SWRK 4831.

4911-19. Special Topics in Social Work. (3). Topics of contemporary interest in social work profession and in social welfare practices. PREREQUISITE: SWRK 2911 or permission of instructor.

4931. Social Work Practice and Organizational Change. (3). Social change, with particular reference to social worker and social agency, principles of social change, sociology of social action, and an examination of social work delivery systems as bureaucracies. PREREQUISITE: SWRK 2911 or instructor's permission.

4932. Models of Social Intervention III. (3). Theory and application of group dynamics concepts as applied to individual in group, committee and community structures and functions, roles of social worker in these settings. PREREQUISITE: SWRK 2911 or 3901.

4933. Directed Individual Study. (1-4). Directed advanced reading, field study and/or research in special areas of social work, not otherwise provided in curriculum. NOTE: No more than 4 hours may be taken in any one semester. May be repeated for maximum of 6 semester hours credit. PREREQUISITE: Social Work major and permission of director, Division of Social Work.

4934. Child Welfare Policy and Services. (3). Historic overview and contemporary application of child welfare policy; problems in policy development; contemporary American child welfare services in both public and private domains. PREREQUISITE: SWRK 2911.

The Fogelman College of Business and Economics

J. TAYLOR SIMS, Ph.D., C.M.E., *Dean*
Room 432, Fogelman Business and Economics Building

School of Accountancy

CONSTANTINE KONSTANS, Ph.D., C.P.A., *Director*
Room 200A, Fogelman Business and Economics Building

ACADEMIC PROGRAMS

School/Department	Major	Concentration Within Major	Degree Offered
School of Accountancy	Accounting		Bachelor of Business Administration
Department of Economics	Business Economics		Bachelor of Business Administration
Department of Finance, Insurance, and Real Estate	Finance		Bachelor of Business Administration
	Financial Services	(1) Insurance (2) Investments (3) Real Estate	Bachelor of Business Administration
	Risk Management and Insurance		Bachelor of Business Administration
	Real Estate		Bachelor of Business Administration
Department of Management	Management	(1) General Management (2) Human Resources Management (3) Office Management	Bachelor of Business Administration
Department of Management Information Systems & Decision Sciences	Management Information Systems		Bachelor of Business Administration
	Decision Sciences	(1) Decision Support Systems (2) Production Operations Management	Bachelor of Business Administration
Department of Marketing	Marketing	(1) Advertising (Marketing Communications) (2) General Marketing	Bachelor of Business Administration
	Sales/Marketing		Bachelor of Business Administration
	Transportation and Distribution		Bachelor of Business Administration
Interdisciplinary Program	International Business†		Bachelor of Business Administration

† In the B.B.A. degree, Foreign Languages may be used as a collateral or second major to accompany International Business.

PURPOSE

The function of The Fogelman College of Business and Economics is to provide the basic education necessary to prepare a person to enter the profession of business. A significant characteristic of the college is that it provides for concentration in the basic areas of economics and business, not as a substitute for, but as a part of a broad liberal education. From forty to sixty per cent of the course work taken for the Bachelor of Business Administration degree (a required minimum of 40 per cent) is taken in such areas as the humanities, the natural and physical sciences, and the social sciences.

The undergraduate and graduate programs of the college are fully accredited by the American Assembly of Collegiate Schools of Business.

Areas of Professional Training

The Fogelman College of Business and Economics offers a wide selection of general and specialized fields, each of which has programs designed to prepare students for a variety of careers:

CAREERS IN ACCOUNTANCY: Accounting is a vital activity in all kinds of business and non-business organizations. Due to the tremendous complexity of accounting rules, tax requirements, and government regulations, as well as the increasing use of computers, it is essential that individuals working in this field possess a highly technical background. The School of Accountancy offers a wide variety of courses designed to prepare students for careers in public, industrial, and governmental accounting with a special emphasis on the use of microcomputers. Graduates with a major in accounting are qualified to take examinations for various professional certifications, including Certified Public

Accountant, Certified Management Accountant, and Certified Internal Auditor. Effective April 14, 1993, persons wishing to take the Certified Public Accountant's Examination in the state of Tennessee will be required to have 30 semester hours beyond the bachelor's degree in accounting. This requirement includes specific guidance for course work at the undergraduate and post-graduate level in accounting and business. Check with your advisor or the State Board of Accountancy for details.

CAREERS IN ECONOMICS: Most economists take jobs in business, using their tools of economic systems and incentives to compete successfully in that arena. Some economics graduates will become professional economists, starting with job titles such as market analyst, financial analyst, and forecaster. Economics is one of the principal pre-law studies. Government economists collect statistical measures of economic activity, control the regulatory process, and plan government revenues and expenditures.

CAREERS IN FINANCE, INSURANCE, AND REAL ESTATE: Due to the greatly increased recognition given to managing the financial operations of a business, with its increased complexity and newer techniques, considerable demand has developed for those skilled in managing the financial flows of a business.

The risk factor involved in both business and life is beyond man's control. To meet this challenge, courses in insurance and business management can be highly rewarding for the college graduate. The department offers preparation for careers in property insurance, life insurance, and risk management.

The ever increasing growth in population, with a constant supply of real estate, demands that the businessman have a working knowledge of real estate problems. Courses are offered to prepare students for both private practice and to function as an integral part of a business organization.

CAREERS IN MANAGEMENT: The effective manager of today must have competence in many disciplines, an understanding of a wide variety of relationships and the ability to analyze evolving management requirements.

Effective adaptation of management to such emergent conditions as the continued growth of science and technology, population, and large scale organization demands a thorough knowledge of management process theory.

The management programs of study are designed to provide professional preparation in the management of business and economic affairs. Opportunities are increasing, as well, in governmental agencies, foundations, hospitals, and other types of organizations.

CAREERS IN MANAGEMENT INFORMATION SYSTEMS AND DECISION SCIENCES: The Management Information Systems program is intended to produce individuals whose knowledge of business systems, computer systems, and systems documentation will allow them to design and select that information necessary for effective decision making in an organization. It is also intended to provide sufficient background to enable professional growth in a rapidly expanding field.

The field of Decision Sciences is a relatively new academic field, but career opportunities exist in virtually every organization. Decision making is a routine activity occurring at every level of an organization. Decisions initiate, correct, and accompany planned change. The more we know about that process and the decision sciences the more effective we are likely to be in and during organizational change.

CAREERS IN MARKETING: The Department of Marketing provides an educational experience for those who are interested in such areas as retailing, wholesaling, industrial marketing, purchasing, advertising, sales management, transportation and distribution, and marketing research. Careers in marketing provide a high degree

of freedom, mobility, security, challenge, and a high level of monetary reward.

Students who wish to teach marketing (distributive education) in high schools, technical institutes, and junior colleges should consult The College of Education for licensure requirements.

CAREERS IN INTERNATIONAL BUSINESS: The Fogelman College of Business and Economics, with the cooperation of the College of Arts and Sciences, offers an interdisciplinary program leading to the Bachelor of Business Administration degree with a major in international business. The International Business Program provides the students with broad theoretical and practical skills that will prepare them to meet challenges of a career in an international business field. Students will, when possible, be afforded the opportunity of working in an international company, in this country or abroad, in order to acquire practical, first-hand knowledge of international operations.

The Pre-Law Curriculum

A student enrolled in The Fogelman College of Business and Economics who wishes to be prepared for entrance to law school will qualify for the Bachelor of Business Administration degree. Any major in The Fogelman College of Business and Economics may be selected, and the regular program for that major, as outlined in the *Catalog*, should be followed.

Honors Program

ADMISSION

Lower Division: Incoming freshmen who score at least 26 on the ACT or its equivalent on other tests are invited to participate and are eligible to enroll in the designated honors sections of this college's lower division courses.

Transfer or students presently enrolled in Memphis State University are eligible to enroll in the designated honors sections of this college's lower division courses if they have a minimum 3.00 grade point average or the recommendation of a faculty member.

Upper Division: To be eligible to enroll in the designated honors sections of this college's upper division courses, students must have a minimum 3.25 grade point average in course work taken in the Fogelman College of Business and Economics and be recommended by a faculty member.

RETENTION

The participating honors student must maintain a minimum 3.00 grade point average in lower division and upper division honors courses and have a minimum 3.25 grade point average in all courses taken in the Fogelman College of Business and Economics in order to continue in the college's Honors Program.

REQUIREMENTS

In order to qualify for "Honors in Business", in addition to an Honors Thesis, a student must successfully complete a minimum of 18 semester hours from the following:

1. No more than 6 hours from Honors Sections in: ACCT 2010, 2020; ECON 3310, 3320; ISDS 2710, 2711, 2750; or ECON 2110, 2120; MATH 1401, 1402.

2. At least 12 hours from Honors Sections in: ECON 4111; FIR 3011, 3130, 3410; MGMT 3110, MGMT 4710; MKTG 3010; MGMT 3510.

In rare circumstances, additional contract work and enrollment in a non-honors section of a required upper division course may be accepted as upper division honors credit. The contract work must have the prior approval of the College Honors Committee.

3. Must complete honors course work in at least 3 disciplines (e.g., Accounting; Economics; Finance, Insurance, and Real Estate; Management; Management Information Systems and Decision Sciences; or Marketing).

4. No more than nine (9) hours in any one discipline may count toward the 18 hours of honors course work.

5. A minimum grade of B is required in each honors course in order for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a B.

THESIS

During their senior year, prospective honors graduates must complete successfully an honors thesis, which in addition to the 18 hours of honors course work, will qualify them to graduate "With Honors in Business". The honors thesis may result from a senior seminar (e.g., ECON 4920), or an independent study course (e.g., ECON 4996, UNHP 4300). Students, however, may elect to write a thesis without receiving formal credit toward graduation.

Students will select a major advisor and one other faculty member to serve as members of their thesis committee. The College Honors Committee will also designate a representative to serve as a third member of a student's thesis committee. Students must submit a thesis proposal, signed by their major advisor and the other two committee members, to the College Honors Committee for approval. Upon completing the thesis, the Thesis Committee will recommend, by majority vote, whether to accept or reject a student's thesis.

CERTIFICATE OF ACHIEVEMENT

Students who complete a minimum of 12 hours in Honors course work with a minimum of 3.25 grade point average and a minimum of B in each of the Honors

courses will receive a Certificate of Achievement.

DESIGNATION OF "WITH HONORS IN BUSINESS"

Students who complete 18 hours (meeting the restrictions listed) with an acceptable Honors Thesis and a minimum 3.25 grade point average in all courses taken in The Fogelman College of Business and Economics, and in all Honors courses taken in this college, with a minimum overall grade point average of 3.00 will have earned the designation of "With Honors in Business" which will appear on the transcript and diploma.

ORGANIZATION OF THE COLLEGE

The Fogelman College of Business and Economics comprises The School of Accountancy and five academic departments: Economics; Finance, Insurance, and Real Estate; Management; Management Information Systems and Decision Sciences; and Marketing. These academic units offer a variety of majors and minors, the detailed requirements for which are listed later in this section. The interdisciplinary International Business Program centered in this college offers an undergraduate major in International Business;

requirements are listed in the section pertaining to departmental requirements. In addition there are two research units: Bureau of Business and Economic Research and Center for Manpower Studies.

Academic Advising

Every student entering The Fogelman College of Business and Economics will be assigned an advisor by the college's Advising Office. The advisor will assist the student in the selection of appropriate courses, and provide the opportunity for meaningful discussion regarding career goals, past academic experience and future academic growth and progress as it relates to the student's development. This assistance, however, does not in any way relieve the student of the primary responsibility of studying the *Catalog* and fulfilling all the requirements for the degree.

Intent to Graduate

Intent to graduate forms are filed with the Graduation Analyst in The Fogelman College of Business and Economics. Students are requested to schedule an appointment before the established application deadline published in each current *Catalog or Schedule of Classes*. Deadlines are strictly enforced. At this time, an audit of the prospective graduate's academic record is conducted, and the applicant will be provided with an official graduation agreement indicating the remaining degree requirements.

RESIDENCE REQUIREMENTS

Residence requirements for a degree in business administration are as follows: (1) the senior year must be completed at Memphis State University, (2) at least 33 hours of upper division business courses must be taken at Memphis State University, and (3) 12 of the 33 upper division business administration hours must be in the major field.

A student transferring credits from a two-year (lower division) collegiate institution must complete a minimum of 60 semester hours in an accredited senior institution.

MINOR. In order to earn a minor in this college, a transfer student majoring in one of the other colleges of the university or in this college must earn at Memphis State University at least 6 upper division business administration hours of the total number of hours required for that minor.

See University Residence Requirements in the *Graduation from the University* section.



TRANSFER CREDIT

The official evaluation and acceptance of transfer credit is the responsibility of the Transfer Affairs section of the Office of Admissions. The Undergraduate Advising Office of The Fogelman College of Business and Economics, however, will be happy to answer inquiries regarding the applicability of transfer course work for the completion of the B.B.A. degree.

If a student transfers credit in required business courses which are classified as upper division in this college, but were taken as lower division credit, or taken at a two-year (lower division) institution, these courses must be *repeated or validated by examination*.

Each transfer student must: (1) have completed all required lower division business administration courses with a minimum grade of C in each; (2) have a minimum quality point average of 2.25 in all required lower division business administration core courses and in MATH 1211 (College Algebra); (3) have accumulated 55 hours of course work including the required 9 semester hours of English, MATH 1211 and 1312 and the lower division business administration core; (4) make application for admission to upper division business administration course work and for admission to business administration major programs (application forms may be obtained from the Office of the Assistant to the Dean for Undergraduate Programs); and (5) maintain a minimum quality point average of 2.25 in all required business administration course work taken at Memphis State University.

B.B.A. DEGREE REQUIREMENTS

1. To qualify for the Bachelor of Business Administration (B.B.A.) degree, the student must complete a minimum of 132 semester hours with a minimum overall quality point average of 2.00 and must meet additional quality point average requirements described below.

2. A minimum quality point average of 2.25 is necessary for all required lower division and upper division business administration core courses and in the required mathematics course. The required lower division courses are: ACCT 2010, 2020; ECON 2110, 2120; MGMT 1010 (if taken); ISDS 2710, 2711, 2750 (ACCT 2410 for School of Accountancy students); and MATH 1211.

3. A minimum of 40% (53 hours) of the 132 hours required for the degree must be from outside the college (except for ECON 2110 and 2120), and 40% (53 hours) of the 132 semester hours required must be from within the college.

4. A minimum grade of C must be earned for each required course in the lower division and upper division business administration core curriculum and in each course required for the major and/or minor. (Transfer students are referred to the section entitled *Transfer Credit*.)

5. B.B.A. students may apply no more than two semester hours of physical activity courses to the minimum degree requirements of 132 semester hours.

6. All courses used to satisfy specific degree requirements of this college must be taken on a "letter grade" OR "credit by examination" basis. Hours earned on a "credit/no credit" basis are accepted only in courses which are designated as electives in the student's degree program. Courses taken on an "audit" basis cannot be used to satisfy college requirements.

7. The computer literacy requirement will be met by successfully passing ISDS 2750 (Introduction to Management Information Systems with Computer Applications) and other required Business Administration core courses. Students in The School of Accountancy will meet the computer literacy requirement by passing ACCT 2410.

8. The following General Education requirements must be met:

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

General Requirements

The college curriculum is organized into a lower division and an upper division:

THE LOWER DIVISION (LD) comprises the freshman and sophomore years, the first four semesters of university work. Courses offered in the lower division are numbered from 1000 through 2999, and the student must register consistently for all lower division requirements until they are completed.

THE UPPER DIVISION (UD) comprises the junior and senior years of undergraduate work; courses offered in the upper division are numbered 3000 through 4999.

Any student seeking a degree in The Fogelman College of Business and Economics must: (1) have completed all required lower division business administration courses with a minimum grade of C in each; (2) have a minimum quality point average of 2.25 (Accounting majors 2.5) in all required lower division business administration core courses and in MATH 1211; (3) have accumulated 55 hours of course work including the required 9 semester

hours of English, MATH 1211 and 1312 and the lower division business administration core; and (4) make application for admission to upper division business administration course work and for admission to business administration major program. Application forms may be obtained from the Office of the Assistant to the Dean for Undergraduate Programs.

Any exception to the above requirements must be granted by the Dean of The Fogelman College of Business and Economics or the Assistant to the Dean for Undergraduate Programs.

Enrollment Priority

Neither admission by Memphis State University and The Fogelman College of Business and Economics, nor completion of the minimum requirements guarantees admission to any specific course offered by the college. Limited resources may require that enrollment in business classes be based on ranking by *Quality Point Average* with exceptions being made for graduating seniors.

I. NON-BUSINESS CURRICULUM (53 hours minimum)

English Composition (6 hours): ENGL 1101, 1102 with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (6 hours): MATH 1211 with a minimum grade of C, and MATH 1312.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage: (3 hours): ART 1101, COMM 1851, DANC 1551, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from pre-1500: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from post-1500: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405; SOCI 3422.

Social Science (6 hours): ECON 2110, 2120, with a minimum grade of C in each course.

Natural Science (8 hours — Sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000. **NOTE:** Only 2 semester hours of physical activity may be counted toward the minimum 132 hours required for the B.B.A.

Non-Business Electives (lower division or upper division to bring the total of non-business hours earned to 53).

II. BUSINESS CORE CURRICULUM

Lower Division (18 hours)

No grade below C and a minimum quality point average of 2.25 (Accounting majors 2.5) is necessary for all required lower division business core courses and in MATH 1211. The lower division business

courses include: ACCT 2010, 2020; ECON 2110 2120; MGMT 1010 (if taken); ISDS 2710, 2711; 2750 (ACCT 2410 for School of Accountancy students).

MGMT 1010 Introduction to Business (3) FRESHMAN ONLY. NOTE: If taken by student with 25 or more hours, credit will not count for B.B.A. degree.

ISDS 2710 Business Statistics I (3)

ISDS 2711 Business Statistics II (3)

ISDS 2750 Management Information Systems with Computer Applications (3) (ACCT 2410 for accounting majors)

ACCT 2010 Fundamentals of Accounting I (3)

ACCT 2020 Fundamentals of Accounting II (3)

III. BUSINESS CORE CURRICULUM

Upper Division (30 hours)

No grade below C and 2.25 Q.P.A. in the following courses:

ECON 4111 Managerial Economics (3)

FIR 3011 Business Law (3)

FIR 3130 Legal, Social, and Political Environment of Business (3)

FIR 3410 Business Finance (3)

MGMT 3110 Organization and Management (3)

MGMT 4710 Business Policy (3) (Enrollment usually limited to graduating seniors)

MKTG 3010 Principles of Marketing (3)

MGMT 3510 Business Communications (3)

ISDS 3510 Production and Operations Management (3)

Choose One: MGMT 4810 International Management, (3); MKTG 4530, International Marketing (3); ECON 4350, International Economics (3); FIR 4550, International Finance (3)

(Transfer students are referred to the section *Transfer Credit*.)

balanced as to conceptual vs. pragmatic knowledge, that will prepare students to commence and continue the development of their careers as professional accountants, financially-oriented managers/advisors, and professors of accounting; (2) to promote both applied and theoretical research of high quality and of significance to both the accounting profession and the academic accounting discipline; and, (3) to provide leadership and support in its areas of expertise to other academic units, the profession, the business community, and the general public.

REQUIREMENTS FOR MAJOR AND MINOR

Admission Standards: To be eligible for admission to The School of Accountancy an applicant must: (1) have completed all required lower division business administration courses with a minimum grade of C in each; (2) have a minimum quality point average of 2.5 in all required lower division business administration core courses and in MATH 1211; (3) have accumulated 55 hours of course work including the required 9 semester hours in English, MATH 1211 and 1312 and the lower division business administration core; and (4) make application for admission to upper division business administration coursework and for admission to the Accountancy Program. In exceptional circumstances the school director may admit students who do not meet the GPA requirement on the basis of superior ACT scores, performance in introductory accounting courses, and other such special criteria. Prospective accountancy students who meet these requirements should apply to The School of Accountancy at the beginning of the semester in which they plan to enroll in ACCT 2410.

The Major: ACCT 2410 and 27 upper division semester hours in accounting courses as follow:

ACCT 3110 and 3120, 3310, 3510, 3721, 3722, 4020, 4240, 4720 (Laboratory); choice of two of the following: ACCT 4210, 4310, 4410, 4520, 4540, 4610. Students may present for graduation no more than 33 semester hours of course work in accounting courses other than ACCT 2010/2020. In addition, all accounting majors will be required to take the AICPA Level I and Level II Examinations prior to graduation.

The Minor:

For students whose major is in another college of the University: ACCT 2010, 2020, 2410, 3110, 3120, 3310, 3510, 3721, 3722, 4720.

For students whose major is in a department in The Fogelman College of Business and Economics: ACCT 2410, 3110, 3120, 3310, 3510, 3721, 3722, 4720.

FRESHMAN YEAR

ENGL 1101	3	ENGL 1102	3
Natural Science (Note 1)	4	Natural Science (Note 1)	4
Fine Arts (Note 1)	3	MATH 1312	3
MATH 1211	3	HIST 2601 (Note 1)	3
Hist/Phil Heritage (Note 1)	3	Hist/Phil Heritage (Note 1)	3
HPER 1100	2	Phys Ed	2
	18		18

SOPHOMORE YEAR

ACCT 2010	3	ACCT 2020	3
ENGL 2201	3	HIST 2602 (Note 1)	3
COMM 2381	3	ECON 2120	3
ECON 2110	3	ACCT 2410	3
ISDS 2710	3	ISDS 2711	3
Elective (Non-Bus)	3	Elective	3
	18		18

JUNIOR YEAR

ACCT 3721	1	ACCT 3722	1
ACCT 3110	3	ACCT 3120	3
ACCT 3310	3	ACCT 3510	3
FIR 3011	3	FIR 3130	3
FIR 3410	3	MGMT 3110	3
MKTG 3010	3	ISDS 3510	3
	16		16

SENIOR YEAR

ACCT 4720	1	ACCT 4240	3
ACCT 4020	3	ACCT Elective	3
ACCT Elective	3	MGMT 4710	3
MGMT 3510	3	ECON 4111	3
Elective	3	International Bus. (Note 2)	3
	13		15

Note 1 See Fogelman College of Business and Economics Non-Business curriculum (General Education) requirements for acceptable alternative courses.

Note 2 Students must select one of the following: ECON 4350, FIR 4550, MGMT 4810, MKTG 4530.

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

Department of Economics

The Department of Economics has two major objectives: to function as a service department for other departments in The Fogelman College of Business and Economics, as well as the other colleges of the University, and to prepare students majoring in economics by providing a solid foundation in the principal areas of economics.

In general, the department attempts to give economics majors a solid background in economic theory, quantitative economics and applied economics.

ECONOMICS

The Major (B.B.A.): A minimum of 21 upper division semester hours in courses as follows:

ECON 3310, 3320, 4920 and four additional upper-division courses selected with the approval of the department advisor.

The Major (B.A., College of Arts and Sciences): The student is required to meet the requirements for the Bachelor of Arts degree plus these specific major requirements:

ECON 1010 or 2110, 2120; 3310, 3320, 4920, and five additional upper-division courses, for a total of 30 semester hours, selected with the approval of the department advisor.

The Minor:

For students whose major is in another college of the University: 18 semester hours in economics courses, including ECON 1010 or 2110, 2120, 3310, 3320, and 6 additional upper division hours in courses as approved by the department advisor.

For students whose major is in another department in The Fogelman College of Business and Economics: Nine additional upper division hours in economics approved by the department advisor, including 3310 and 3320.

Honors Program:

All students who receive a grade of B or better in ECON 2110 or 2120 honors sections are eligible for the program. Entry to the program can also be obtained through the recommendation of a member of the faculty to the Economics Departmental Honors Committee. A student must maintain an average grade of at least 3.25 in economics to continue in the program and must have an average grade of 3.5 or better in economics to graduate with honors in economics. Honor students take special courses during the junior and senior years, particularly the honors sections of ECON 3310 and 3320, and write a senior research paper. At commencement they are awarded the special distinction "with honors in Economics". Details of the program are available at the Economics Department office.

SCHOOL OF ACCOUNTANCY

The objectives of the School of Accountancy are: (1) to provide a comprehensive, state-of-the-art educational background,

Department of Finance, Insurance, and Real Estate

The primary objective of the department is to provide the basic concepts, principles and analytical tools essential for business decisions in the fields of finance, insurance and real estate. The department curriculum is designed to provide a broad background for effective functioning within each discipline or in related business and governmental fields. More specifically:

(1) Finance majors study the environment, theory and techniques of decisions on the acquisition and allocation of funds by business firms, including the applied areas of investment and financial institutions.

(2) Risk management and insurance majors study risk theory, risk management; life, health, and property-liability insurance and their relationships to other disciplines in business administration.

(3) Real Estate majors will be provided the basic theories and practices of urban land use and economics. Exposure will be to real estate principles, valuation, investment analysis and finance, legal environment, and development.

FINANCE

The Major: A minimum of 21 upper division semester hours in courses as follows:

FIR 3710, 3720, 4440, 4610, and nine additional upper division hours in courses selected with the approval of the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: Nine upper division hours in finance approved by the department chair.

For students whose major is within another college of the University: ACCT 2010 and 2020; ECON 2110, 2120, 3610; FIR 3410, 3710. Three additional upper division hours approved by the department chair.

FINANCIAL SERVICES

NOTE: Degree requirements catalog: Fall 1988 or any subsequent valid catalog for students with accredited college credit prior to Fall 1989.

The Major: A minimum of 24 upper division semester hours in courses as follows:

Core: (15)
FIR 3310, 3710, 3810, 4011, 4912, plus completion of one of the following concentrations:

INSURANCE: FIR 4820, 4860, ACCT 3510 (9)

INVESTMENTS: FIR 3720, 4770, ACT 3510 (9)

REAL ESTATE: FIR 4320, 4350, ACCT 3510 (9)

RISK MANAGEMENT AND INSURANCE

The Major: A minimum of 21 upper division semester hours in courses, as follows:

FIR 3810, 4870 and either FIR 4810 or FIR 4820, and a minimum of twelve additional upper division hours in courses selected with the approval of the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: FIR 3810, 4870 and three additional upper division hours in insurance approved by the department chair.

For students whose major is within another college of the University: ACCT 2010, ECON 2110, ISDS 2710, FIR 3011, 3810, 4870, and three additional upper division hours in insurance or finance approved by the department chair.

REAL ESTATE

The Major: A minimum of 21 upper division semester hours in courses, as follows:

FIR 3310, 4310, 4320, 4340, 4350, and a minimum of 6 additional upper division hours in courses selected with the approval of the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: FIR 3310 and six additional upper division hours in real estate approved by the department chair.

For students whose major is within another college of the University: ACCT 2010; ECON 2110; FIR 3011, 3130, 3310, and six additional upper division hours in real estate approved by the department chair.

Department of Management

The effective manager of today must have competence in many disciplines, an understanding of a wide variety of relationships, and the ability to analyze evolving management requirements. Regardless of the functional speciality, the professional manager must also be a leader of people who knows how to organize and motivate groups of people serving the goals of the organization.

Effective adaptation of management to such emergent conditions as the continued growth of science and technology, populations, and large scale organization demands a thorough grasp of management process theory including planning, organizing, directing, and controlling of operations.

The management curricula include the following concentrations: (1) general management, (2) human resources management, and (3) office management.

Students selecting the area of general management will focus on integration of operations and environments. This option is designed for those students who desire a program which allows for flexibility in the choice of careers in management.

The human resources management concentration covers the traditional areas of personnel, collective bargaining, labor legislation, wage and salary administration. Also, developments in the behavioral sciences are included in this area.

The office management option provides a broad background for students pursuing careers in office management or administrative assistant positions.

MANAGEMENT

The Major: a minimum of 21 upper division semester hours, including MGMT 3215, 4420, and courses as listed in one of the concentration areas below. (Where MGMT 4810 is used to fulfill a requirement in the major, students must select one course from MKTG 4530, ECON 4350, or FIR 4550 to satisfy the international component of the Business Core Curriculum.)

GENERAL MANAGEMENT: MGMT 4810, ACCT 3010, ISDS 4790. The remaining 6 hours of the 21 hour minimum for the major may be selected from 4000-level courses in Management and one of the following courses: ECON 3610, FIR 4440, MKTG 3610.

HUMAN RESOURCES MANAGEMENT: MGMT 4210, 4220, 4230, 4240. The remaining 3 hours of the 21 hour minimum for the major may be selected from the following: MGMT 4810; TECH 3386; ECON 3210; PSYC 3508; FIR 4860.

OFFICE MANAGEMENT: MGMT 4330, 4410, 4460. The remaining 6 hours of the 21 hour minimum for the major may be selected from the following: MGMT 4320; ISDS 4430; ACCT 3010.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: MGMT 3215, 4420, and 6 upper division semester hours in management.

For students whose major is within another college of the University: MGMT 3110, 3215, 4420; ISDS 3510; and 6 upper division semester hours in Management.

Department of Management Information Systems and Decision Sciences

Managers and nonmanagers alike depend upon information for decision making. To be useful that information must be understandable, timely, thorough, focused on the decision at hand, and in the hands of the appropriate individual. Accomplishing all this is the challenge of Management Information Systems and the Decision Sciences. It requires a knowledge of individual and/or group behavior, the process of perception (how people select and interpret information), the decision tools they need, computers and communication technology, systems design, managing data, and the impact individual decisions have on the organization.

Management Information Systems and the Decision Sciences include several specialized areas including Artificial Intelligence, Expert Systems, Telecommunications, Cognitive Processing, Production/Operations Management, Management Science, Decision Support Systems, Management Information Systems Planning, Decision Theory, Statistics, Data Base Management, Office Automation, and general applications of computers and microcomputers to business.

Many Management Information Systems and Decision Science courses require substantial hands-on experience in computer labs. Therefore, the department does not allow credit by examination for upper division courses.

MANAGEMENT INFORMATION SYSTEMS

The Major: ISDS 2760, 3750, 3760, 3770, 3775, 4785, and two of the following: ISDS 3790, 4765, 4780, 4795.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: ISDS 3770, 3775, 4795.

For students whose major is within another college of the University: ISDS 2750, 2760, 3770, 3775, 4795, and either 4780 or 4785.

DECISION SCIENCES

NOTE: Degree requirements catalog: Fall 1988 or any subsequent valid catalog for students with accredited college credit prior to Fall 1989.

The Major: A minimum of 21 upper division semester hours including ISDS 3760 and 4512, and courses listed in one of the following concentration areas:

PRODUCTION OPERATIONS MANAGEMENT: ISDS 4510 and 4511, MKTG 3610 or 3620, and two of the following: ISDS 3765, 4711, 4760, MGMT 4420, TECH 4462, 4464, 4466.

DECISION SUPPORT SYSTEMS: Five of the following: ISDS 3765, 3770, 3775, 4711, 4760, 4765.

Department of Marketing

The objective of the Department of Marketing is to provide a broad view of the marketing process and to develop an understanding of all the factors involved in the marketing of goods and services. Students may select from three majors:

(1) Marketing majors may choose from among two areas of concentration as outlined below. Emphasis is placed upon the practical application of marketing concepts. This approach teaches entry level skills while preparing for future advancement to top positions in marketing management.

(2) Sales/Marketing majors are taught practical and theoretical sales and sales management skills. Particular emphasis is placed on interpersonal communication techniques and on the practical application of the marketing concepts as they apply to sales and sales management.

(3) Transportation and Distribution majors are taught the details of transportation economics and traffic management as well as an analysis of the political and competitive environment in which transportation practitioners must function. Additionally, numerous distribution functions such as warehousing, inventory management, order processing, and distribution planning are covered.

MARKETING

The Major: a minimum of 21 upper division semester hours in marketing courses as follows:

MKTG 3012, 3610, 4080, 4901. One of the marketing concentrations listed below (3 hours must be 4000 level).

ADVERTISING (Marketing-Communications): Mass communication media, advertising agencies, advertising departments, advertising decisions, and other advertising activities: MKTG 3140, 3170, 4150, 4440.

GENERAL MARKETING: Allows a concentration in marketing without specialization. (A minimum of 9 semester hours, at least 3 hours at the 4000 course level): MKTG 3140, 3320, 3620, 4220, 4410, 4440, 4530.

The Minor:

For students whose major is in another college of the University: ACCT 2010; ECON 2120; and either (1) MKTG 3010 or 3011; 9 semester hours from the marketing core (MKTG 3012, 3610, 4080, 4901); and 6 hours from one of the marketing areas of concentration upon approval of the department chair OR (2) MKTG 3010 or 3011; 6 hours from the

following courses: MKTG 3012, 3610, 4080; and any 9 hours of marketing courses approved by the department chair.

For students whose major is in another area in The Fogelman College of Business and Economics: Twelve (12) hours of marketing courses approved by the department chair.

SALES/MARKETING

The Major: a minimum of 21 upper division semester hours in marketing courses as follows: MKTG 3012, 3410, 3610, 4410, 4080, 4901, and one (1) of the following courses: MKTG 3140, 4210, 4220, 4440. Note: The following non-marketing courses are recommended: PSYC 1101 or SOCI 1111, COMM 1311, COMM 2322, ENGL 3602.

The Minor:

For students whose major is in another college of the University: ACCT 2010, ECON 2120, MKTG 3010 or 3011, 3012, 3410, 4410, and six semester hours from the following courses: MKTG 3140, 4210, 4220, 4440.

For students whose major is in another area in The Fogelman College of Business and Economics: MKTG 3410, 4410, and six semester hours from the following courses: MKTG 3140, 4210, 4220, 4440.

TRANSPORTATION AND DISTRIBUTION

The Major: a minimum of 21 upper division semester hours in marketing courses as follows: MKTG 3012, 3610, 4080, 4901 and three of the following: MKTG 3620, 3630, 4220, 4440, 4620, or 4692.

Program in International Business

The primary objective of the International Business Program is to provide a broad interdisciplinary background for a career in international business. Through the study of theoretical and practical aspects of the operations of international and multinational business and through work in several liberal arts disciplines, the graduate of this program should be prepared, after receiving a minimum orientation training in a particular international firm, to apply the knowledge acquired to the solution of problems faced by the company.

For further information concerning this program, contact the Assistant to the Dean for Undergraduate Programs, The Fogelman College of Business and Economics.

INTERNATIONAL BUSINESS

The Major:

The student majoring in International Business must complete the same courses required of all students

working toward the B.B.A. degree. For additional requirements during the sophomore and junior years, see the International Business advisor. Students majoring in International Business are required to take six credit hours in foreign language. It is also strongly suggested that the students take more than six hours. Students meeting all the requirements established by The Fogelman College of Business and Economics and the University for the B.B.A. degree and also meeting the language requirements established by the Department of Foreign Languages and Literatures for a major in Foreign Language will be conferred a B.B.A. degree with a major in International Business and a second major in Foreign Language.

In the senior year, the student will take 21 semester hours in courses offered by The Fogelman College of Business and Economics, distributed as follows:

15 semester hours (5 courses) from the following group: BA 4000; ECON 4340, 4350; FIR 4550; MGMT 4810; MKTG 4530.

6 semester hours (2 courses) from the following group: ECON 4120; FIR 4440; ISDS 3760, 4711; MKTG 4080.

Two courses from the College of Arts and Sciences are also required in the senior year. See the advisor.

The Minor:

For students whose major is in another area in The Fogelman College of Business and Economics: Nine hours from the following courses with the approval of the International Business advisor: BA 4000; ECON 4340, 4350; FIR 4550; MGMT 4810; MKTG 4530.

For students whose major is in another college of the University: The student will take a minimum of 18 hours in The Fogelman College of Business and Economics, at least 9 hours of which must be chosen from the following: BA 4000; ECON 4340, 4350; FIR 4550; MGMT 4810; MKTG 4530.

The necessary prerequisites for the above courses are in parentheses below:

BA 4000 (Consent of the International Business advisor); ECON 4340 (ECON 2120); ECON 4350 (ECON 2120); FIR 4550 (FIR 3410 or consent of instructor); MGMT 4810 (MGMT 3110); MKTG 4530 (MKTG 3010).

Pre-Professional Business Administration Minor

The Fogelman College of Business and Economics offers a pre-professional minor (30 hours) for students whose major is in another college of the university. Requirements are as follows:

ACCT 2010, 2020; ECON 2110, 2120; ISDS 2710, 2750; FIR 3130, 3410; MGMT 3110; MKTG 3010 or 3011. Accounting, economics, and junior standing are prerequisites for 3000 level courses.

School of Accountancy Course Descriptions

CONSTANTINE KONSTANS, Ph.D., CPA

Director, School of Accountancy

Associate Dean, Fogelman College of Business and Economics
Room 200, Fogelman Business and Economics Building

JOHN M. MALLOY, Ph.D., J.D., C.P.A.

Associate Director for Taxation

PETER L. MCMICKLE, Ph.D., C.P.A.

Associate Director for Systems

In addition to specific prerequisites, junior standing or permission of the school director is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

Courses in the School of Accountancy numbered from 3110 to 4911 are open only to students fully admitted to the School of Accountancy, or with the permission of the School Director or designate.

H510 ACCOUNTANCY (ACCT)

2010. Fundamentals of Accounting I. (3). Collection and analysis of financial transactions and communicating information they contain with periodic general purpose financial statements using double-entry accrual accounting techniques. Use of accounting procedures to routinize and control repetitive activities. Theory stressed with minimum necessary attention to clerical operations.

2020. Fundamentals of Accounting II. (3). General survey of cost accounting, income taxes, financial statement analysis, and special accounting analysis for managerial decision making. PREREQUISITE: ACCT 2010.

2410. Computer Applications in Accounting. (3). Introduction to the major concepts and issues in management and accounting information systems. Hands-on learning of computer applications in accounting including spreadsheet modeling, introduction to database, and word processing. PREREQUISITE: OR COREQUISITE: ACCT 2020.

3010. Managerial Accounting. (3). Accounting as it relates to managerial control. Includes financial statement analysis including price level changes, cost controls, budgeting, quantitative accounting techniques for decision making in management. PREREQUISITE: ACCT 2020. This course is for non-accounting majors only.

3110. Intermediate Accounting I. (3). Review of accounting process and financial statements; cash; receivables and short-term investments; inventories; short-term liabilities and income recognition; operational assets; intangibles. PREREQUISITES: ACCT 2020, 2410. COREQUISITE: ACCT 3721.

3120. Intermediate Accounting II. (3). Long-term debt; corporations, formation and changes after formation; retained earnings; long-term investments; statement of cash flows; pensions; leases; E.P.S.; deferred income taxes; accounting changes; financial reporting and changing prices. PREREQUISITE: ACCT 3110; COREQUISITE: ACCT 3722.

3310. Cost Accounting. (3). Cost systems, including job order, process, and standard, as management information systems for planning and control. Allocation of indirect costs, preparation of variable budgets, and determination of standard cost variances and their meaning. PREREQUISITES: ACCT 2020, 2410.

3510. Federal Income Tax I. (3). Introduction to the federal income taxation of individuals.

3721. Support Skills for Accountants I. (1). Aspects of generally accepted accounting principles and international accounting from standpoint of utilizing support skills fundamental to successful performance. PREREQUISITE: ACCT 2410; COREQUISITE: ACC 3110.

3722. Support Skills for Accountants II. (1). Continuation of ACCT 3721. PREREQUISITE: ACCT 3721; COREQUISITE: ACCT 3120.

4020-6020. Accounting Systems. (3). (4450). Accounting systems analysis and design emphasizing the accounting cycles approach. Manual and computer executed flowcharts; dataflow diagrams. Theory of systems control in an organizational setting. Techniques for developing well designed accounting systems in manual and computerized environments focusing on traditional file structures. On-site practicum with an actual company. PREREQUISITES: ACCT 3120, 3310.

4210-6210. Advanced Accounting. (3). Partnerships, statement of affairs, receiver's accounts, statement of realization and liquidation, business combinations and consolidated financial statements, fund accounting, international accounting. PREREQUISITE: ACCT 3120.

4240. Auditing. (3). Ethics in accounting practices, internal control, auditing standards and procedures, programs of audit of various accounts, construction and indexing of various papers, reports to clients; practice audit carried out. PREREQUISITE: ACCT 4020.

4310-6310. Advanced Cost Accounting. (3). Budgets, determination of standards, variances and their functions, cost reports, profit projecting, direct costing, gross profit and break-even analysis, cost-profit-volume analysis, capital expenditure control, comparative cost analysis. PREREQUISITE: ACCT 3310.

4410-6410. Advanced Computer Applications in Accounting. (3). Advanced techniques for the use of computer application packages and programming in such areas as financial modeling, financial analysis, productivity, and presentation as well as other applications of current and anticipated interest and benefit to the accounting profession. PREREQUISITES: ACCT 3120, 3310.

4520-6520. Federal Income Tax II. (3). Introduction to the federal income taxation of corporations, partnerships, estates and trusts. PREREQUISITE: ACCT 3510.

4610-6610. Seminar in Accounting. (3). Capstone course to be taken, preferably, the student's graduating semester. Impact on financial reporting of SEC and other regulatory agencies; in-depth calculation of E.P.S.; update on taxes; conceptual framework of accounting; inflation accounting; financial statement analysis. Current pronouncements of FASB and AICPA committees. PREREQUISITE: ACCT 3120.

4720. Microcomputer Accounting Laboratory. (1). (2720). Use of microcomputer to perform accounting and auditing software. PREREQUISITES: ACCT 3120, 3310.

4910. Problems in Accounting. (1-3). Students will conduct approved projects in major area under supervision of faculty. PREREQUISITE: Permission of school director.

4911. Internship in Accounting. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved, supervised by department faculty member. Credit allowed only after acceptance of report, varies with complexity of duties. PREREQUISITES: Senior standing and a minimum Q.P.A. of 2.75.

Business and Economics Course Descriptions

H500 BUSINESS ADMINISTRATION (BA)

In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

4900. Practicum in Research. (1-3). Actual problem-solving research activities in business and economics. Student assigned to project either being conducted currently by faculty member or one developed under supervision of faculty member. Whenever possible, project within student's major field of study. PREREQUISITE: senior status.

4911. Internship in International Business. (1-6). (4000). Practical operations of international business. Students placed for 1-8 month period with cooperating business firm operating in fields of international banking and finance, transportation, management, marketing, or accounting. Academic credit granted upon certification of satisfactory performance by cooperating business

firm and upon acceptance by faculty of written research report by student.

ECONOMICS

PROFESSOR DONALD R. WELLS,

Interim Chair

Room 400, Fogelman Business and
Economics Building

H520 ECONOMICS (ECON)

1010. Economic Issues and Concepts. (3). Critical examination of current economic issues facing the country. Discussion and use of elementary tools of economic analysis for familiarization with importance and applicability of economic reasoning. Will not satisfy either ECON 2110 or 2120 requirement for College of Business and Economics.

2110. Introduction to Macroeconomics. (3). Nature and functions of the national economy in a global context. Includes consumption and investment behavior, national income and product determination, fiscal and monetary policy, and international trade. [G].

2120. Introduction to Microeconomics. (3). Operation of the market economy at the individual and firm level. Includes supply and demand analysis, consumer behavior, behavior of firms in both competitive and monopoly environments, income distribution theory, and effects of government intervention in the market economy. [G].

In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

1020-29. Special Topics in Economics. (3). Current economic issues and problems in the United States. Emphasis on application of tools and analytical methods. PREREQUISITES: ECON 2110, 2120.

1210. Labor Economics. (3). Introduction to institutional aspects of American labor force and its organization wage and employment theory, economic role of collective bargaining, and basic ingredients of public policy toward labor organization. PREREQUISITE: ECON 2120.

1310. Microeconomic Theory. (3). Intermediate approach to price theory. Stress on market mechanism as device for resource allocation; attention to uses of basic microeconomic concepts in analysis of economic problems and in formulation of policy. PREREQUISITE: ECON 2120.

1320. Macroeconomic Theory. (3). Intermediate approach to social income accounting and to functional relationships between important aggregate economic variables as well as to forecasting and social policy implications. PREREQUISITE: ECON 2110.

5580. International Economic Development — An Ecological Perspective. (3). Process of economic development as adaptive interplay between man's needs and ways in which environment exploited to satisfy those needs in both developed and less developed countries. PREREQUISITE: ECON 1010 or 2110 or consent of instructor.

3610. Money and Banking. (3). Monetary and banking history of leading countries with special emphasis on theory of money and banking in United States, deposit and earnings operations of individual banks, interbank and central bank relations. PREREQUISITE: ECON 2110.

4111. Managerial Economics. (3). Direct application of economics to common business problems. Economic framework and empirical techniques of production and cost analysis, project evaluation, pricing, and demand analysis. PREREQUISITES: MATH 1312, ECON 2120, SDS 2711, 2750. [C].

4120. Economic Forecasting. (3). Current economic thinking on problems of recession and inflation as background to economic forecasting. Methodologies of forecasting analyzed with examples of each. PREREQUISITE: ISDS 2711 or equivalent.

4130-6130. Government Regulation of Business. (3). Approaches to legal and legislative control of business — especially tax laws, commission regulations, and antimonopoly legislation — in view of impact of each on industrial operating policy. PREREQUISITE: ECON 1010 or 2110.

4260. Environmental Economics and Policy. (3). Economic analysis of environmental problems and various techniques which can be implemented in their resolution (pollution taxes, sale of pollution rights, regulation and cutright prohibition); complex interaction of environmental degradation, population explosion and economic progress.

4340. Comparative Economic Systems. (3). Theoretical framework underlying major alternative economic systems —capitalism, socialism, communism, fascism — with U. S., Sweden, the U. K., the U.S.S.R., and Spain as examples. Attention to problems and difficulties associated with integration of systems. PREREQUISITE: ECON 1010 or 2110.

4350. International Economics. (3). Historical approach to theory of international trade; consideration of techniques of control over investment and trade, foreign exchange, balance of payments, and world interdependence. PREREQUISITE: ECON 2120 or equivalent.

4410. Development of Economic Thought. (3). Historical development of economic thought. Attention primarily on emergence of Classical and Neoclassical thought, several dissident schools of thought, and twentieth-century economic thought. PREREQUISITE: ECON 1010 or 2110.

4740-6740. Health Care Economics. (3). Topics include unique nature of health care as economic good, health care market and its participants including patients, physicians, and hospitals, and financing and delivery of personal health care in United States and other countries.

4810-6810. Quantitative Economic Analysis. (3). Introduction to mathematical techniques used in economics, including algebra, matrices and determinants, differential and integral calculus, and use of

microcomputer software. PREREQUISITE: one year of college mathematics or consent of instructor.

4820. Econometrics. (3). Introduction to statistical procedures used to estimate and test quantitative economic theories, using microcomputer software for regression analysis.

4910. Problems in Economics. (3). Students investigate issues surrounding selected economic problems and develop reports of that investigation. May not be repeated for credit. PREREQUISITES: upper division standing and approval of department chair.

4911. Internship in Economics. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITES: senior standing and minimum Q.P.A. of 2.75.

4920. Senior Seminar in Economics. (3). Coordinated by department chair and conducted by selected members of department. To integrate several fields and course areas pursued by undergraduate majors into meaningful whole. Required of all departmental majors in their last semester of undergraduate enrollment.

4930-6930. Economic Evaluation of Investment Projects. (3). Objective evaluation of proposed business and social projects. Concentrates on tools of cost-benefit analysis and provides instruction in making and controlling project budgets. PREREQUISITE: ECON 1010 or 2110.

4996. Honors Thesis in Economics. (3) Independent research open only to students enrolled in Economics Department Honors Program. Honors thesis supervised by three-faculty committee selected by student and approved by Economics Honors Committee. PREREQUISITES: permission of Economics Department Honors Committee.

FINANCE, INSURANCE AND REAL ESTATE

PROFESSOR MARS A. PERTL, Chair
Room 402A, Fogelman Business and Economics Building

In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

H530 FINANCE, INSURANCE AND REAL ESTATE (FIR)

2220. Personal Financial Management. (3). Non-technical dealing with broad areas of budgeting, insurance, borrowing and credit purchases, home ownership, investment, taxes, and family financial planning. NOTE: If taken after student has received credit for FIR 3710 or 3810, credit will not count for BBA degree.

3011. Business Law. (3). Elements of law and legal principles encountered in business. Emphasis on basic law of contracts, sales and secured transactions, negotiable instruments, real and personal property, agency, forms of business organization, suretyship, insurance contracts and torts.

3130. The Legal, Social, and Political Environment of Business. (3). Emphasis on legal, social, and political environment in which business and its executives exist. Legal, social, and political forces that affect business operations. Lectures and case discussions.

3310. Real Estate Principles. (3). Basic terminology, principles and issues. Topics include market analysis, real estate law, instruments, legal descriptions, appraisal, investment, finance, brokerage, property management. Designed for non-real estate majors as well as a foundation for further study.

3410. Business Finance. (3). Integration of principles of financial management with institutional finance. Current topics of managerial finance including working capital management, capital budgeting, and acquisition of funds. PREREQUISITES: ACCT 2020, ISDS 2710.

3710. Investments. (3). Principles of investment in stocks and bonds. Includes fundamental, economic,

and technical analysis; measurable and unmeasurable aspects of risk; portfolio management; and the psychological aspects of the market. PREREQUISITE: FIR 3410.

3720. Financial Markets. (3). Survey of important funds markets, institutions and characteristics peculiar to them. Sources of supply of and demand for funds in each market, and complex interrelations among several markets analyzed. PREREQUISITE: ECON 2110.

3770. Commodity Futures Market. (3). Mechanics of trading including the contract, commodities traded, exchanges involved, etc. Transfer of risk and stabilization of prices through futures trading. Role of speculators. Buying/selling strategies including hedging used by farmers, commodity marketers, speculators, and processors.

3810. Principles of Risk and Insurance. (3). Nature and handling of risk in personal and business situations. Emphasis on property, liability and life exposures to loss. Designed for non-insurance major as well as a basis for advanced study.

4011-6011. Estate Planning and Law of Taxation. (3). Survey of law of taxation as applied to transmission of property by gift or death and its impact upon accumulations of wealth. Estate planning from individual viewpoint designed to create, maintain, and distribute maximum estate possible.

4110-19. Special Topics. (3). Current topics in one of following areas: Finance, Insurance, Real Estate, or Business Law. Topics varied and announced in *Schedule of Classes*. May be repeated once with change in topic area. PREREQUISITE: consent of instructor.

4310-6310. Real Estate Law. (3). Law and legal instruments as applied to real estate. To serve needs of property owners and those engaged in real estate business. PREREQUISITE: FIR 3310.

4320. Real Estate Finance. (3). Terminology, legislation, principles, and analytical techniques pertaining to financing of real estate. Perspective of lender, residential borrower, and income property borrower. PREREQUISITE: FIR 3410.

4330-6330. Determinants in Housing Finance. (3). Consideration of determinants of private and public demand for housing; relationships between construction and economic trends; new town legislation, urban renewal and development, improving environment and housing for low income groups, criteria for assessing public policy, policy implementation; role of private enterprise in developing, maintaining and improving housing.

4340-6340. Real Estate Appraisal. (3). Basic terminology, principles, procedures, and issues. Topics include the nature of value, principles of value, appraisal process, market approach, cost approach, capitalization of income approach, gross rent multiplier approach, and appraisal reports.

4350. Real Estate Investment Principles. (3). Principles and practices reviewed and evaluated. Topics include investment strategy, ownership forms, tax implications, cash flow analysis, measures of return, risk management, and property selection.

4440. Managerial Finance. (3). Analytical approaches to firm's financial decisions; including current asset management, capital budgeting, cost of capital, capital structure determination, and dividend policy. PREREQUISITE: FIR 3410.

4550. International Finance. (3). Financing international trade and investments; foreign exchange markets and exchange rates; balance of payments; current developments in international financial cooperation.

4610-6610. Cases in Managerial Finance. (3). Application of tools and principles introduced in previous courses to develop up-to-date problem solving techniques: Cases approached from standpoint of top level management and utilize both quantitative and qualitative analysis. PREREQUISITE: FIR 4440.

4710. Commercial Banking. (3). Study of bank management and bank regulation. Examination of conditions that lead to bank regulation and conditions that caused deregulation. Exploration of current theories of profitable bank operations. PREREQUISITES: ACCT 2020; ECON 2110, 2120.

4720-6720. Operations and Management of Financial Institutions. (3). Exposure to financial policies and decision-making that are peculiar to financial institutions in United States. Management of institutions

consistent with adequate standards of liquidity and solvency. PREREQUISITES: FIR 3410, 3720.

4770. Security Analysis and Portfolio Management. (3). Development of techniques for finding actual worth of securities, primarily stocks and bonds. Portfolio management involves selection, timing, diversification, and other aspects of supervising investment funds. PREREQUISITE: FIR 3710.

4810-6810. Property and Liability Insurance I. (3). Forms and functions of fire, marine, automobile, general liability and other types of property and liability insurance. Emphasis on business and industrial applications. PREREQUISITE: FIR 3810 or consent of instructor.

4820-6820. Life and Health Insurance. (3). Functions of life and health insurance. Emphasis on economic security needs, human behavior and the problems related to death and dying. Individual life, health and annuity contracts and social insurance. Concepts in risk selections and regulation. PREREQUISITE: FIR 3810 or consent of instructor.

4840-6840. Multiple Line Insurance Company Operations. (3). Company and industry functions other than contracts, including rating, rate-making, reserves, auditing, underwriting, reinsurance, claims, production engineering, and governmental supervision. PREREQUISITE: FIR 3810 or consent of department chair.

4860-6860. Employee Benefit Programs. (3). Life, health and pension benefit programs from the viewpoint of the benefit planner. Topics include the reasons for providing such programs, alternate methods for providing benefits, and broadly designing specifications for benefits.

4870. Risk Management. (3). Problems of risk manager in small and large firms, methods of handling risk that serve as alternatives to obtaining insurance, and brief survey of insurance as standard for comparisons.

4910. Problems in Finance, Insurance, or Real Estate. (1-3). Student will carry on approved research projects in the major area under supervision of staff members. PREREQUISITE: senior standing and permission of the department chairman.

4911. Internship in Finance, Insurance, and Real Estate. (1-6). Internship in business organization to gain on-the-job experience in real-life environment. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITE: senior standing and minimum QPA of 2.75.

4912. Personal Financial Planning Applications. (3). Computer based applications of practical financial planning problems common to planner. PREREQUISITES: junior standing and minimum of 9 hours in finance courses.

3215. Personnel Administration and Industrial Relations. (3). Personnel functions and basic concepts. Includes human resource planning, job analysis, staffing, development, compensation, employee/ labor relations, health and safety, industrial employee union representation, and impact of the Equal Employment Opportunity Act.

3510. Business Communication. (3). Communication theory applied to business and the professions, with emphasis on effective writing. Presentation of written and oral case solutions, including letters, memorandums, reports, and employment applications. Selection and use of research sources. Consideration of business ethics, technology, and intercultural communication. [W].

4110-19. Special Topics in Management. (3). Topics varied and announced in *Schedule of Classes*. PREREQUISITE: consent of instructor.

4210. Human Resources Management. (3). In-depth examination of selected issues in human resources management utilizing special problems, topics, and cases. Major issues include planning, employment, development, utilization, performance appraisal, maintenance, and separation of human resources. PREREQUISITES: MGMT 3110, 3215.

4220. Collective Bargaining. (3). Labor-management relations from standpoint of collective bargaining contracts; emphasis on process of negotiating agreements, including procedures, tactics, and subject matter. PREREQUISITES: MGMT 3110, 3215.

4230. Employee-Management Law and Legislation. (3). Historic and philosophic background of employee-management legislation and its impact on the workplace, including recent developments in discrimination, health and safety, and employee rights and responsibilities. PREREQUISITES: MGMT 3110, 3215.

4240. Compensation Administration. (3). Systematic examination of administration of wage and salary as tool of management. Through use of job descriptions, job analysis, and job evaluation methods, instruction in techniques of rationalizing wage structures. Analyses of some outstanding considerations which must be taken into account in installing and administering wage programs are made. PREREQUISITES: MGMT 3110, 3215.

4320. Office Systems and Procedures. (3). (ADOS 4320) Trends and practices related to document processing in the office environment, of automated equipment for communication and information technology. PREREQUISITE: MGMT 3510.

4330. Records Management and Control. (3). (ADOS 4330) Functions and basic concepts of records and database management; filing and database classification systems, forms design, inventory and analysis, storage and retrieval, and records management and control for computerized systems.

4410-6410. Office Management. (3). (ADOS 4410) Modern methods in office organization and management, including office systems and procedures, office layout and design, and ergonomic considerations

4420. Organizational Behavior in Business. (3). Human relations as applied to people at work in all kinds of organizations. Emphasis on understanding of human behavior and motivation of employees to work together in greater harmony. Topics include fundamentals of organizational behavior, leadership and its development, organizational environment, and communication and group processes. PREREQUISITE: MGMT 3110.

4460. Word Processing Management. (3). (ADOS 4420). Concepts and development of managerial techniques in word processing; word processing systems and procedures, equipment selection, layout and design of word processing departments, dictation systems and, human aspects of word processing systems.

4710. Business Policy. (3). Advanced problems in determination, execution, and control of strategic management process in light of changing environments in which organizations operate. PREREQUISITES: MGMT 3110 and senior standing in The Fogelman College of Business and Economics. Enrollment limited to graduating seniors.

4810. International Management. (3). Introduction to issues in international business and exploration of environment facing firms in international arena. Problems in planning, implementing, and controlling activities such as choosing foreign associates, selecting

plant location, and dealing with labor, structure, legal constraints, and trade problems. PREREQUISITE: MGMT 3110.

4820. Venture Initiation Management. (3). Initiation process of new business venture. Participants as teams develop detailed development plan covering all phases of business initiation and development.

4910. Management Problems. (1-3). Student carries on approved research projects in his major area under supervision of staff members. PREREQUISITES: senior standing and permission of department chairman.

4911. Internship in Management. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITE: senior standing and a minimum Q.P.A. of 2.75.

MANAGEMENT INFORMATION SYSTEMS AND DECISION SCIENCES

PROFESSOR LLOYD BROOKS, Chair
Room 300, Fogelman Business and Economics Building

In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

Comparable courses taken previously with a MGMT prefix may not be taken for additional credit with the ISDS prefix.

H557 INFORMATION SYSTEMS AND DECISION SCIENCES (ISDS)

1230. Keyboarding and Microcomputer Applications. (3). (ADOS 1230). Development of basic keyboarding skills for efficient operation of computer for business and personal use; emphasis on various microcomputer applications including specific business applications.

1240. Programming for Business. (3). (ADOS 1240). Programming methodology using BASIC and FORTRAN languages and business applications. Designing and writing a variety of programs for use on CRT terminals, minicomputers, and microcomputers. Emphasis on financial, accounting, management, economic, and office areas.

1250. Microcomputer Applications in Management Information Systems. (3). (ADOS 1250). Hands-on experience on microcomputers; emphasis on specific business applications for solution of practical problems using electronic spreadsheets, word processing, and database software programs. Prior knowledge of microcomputers not required.

2710. Business Statistics I. (3). Introduction to basic statistical procedures for analysis and interpretation of business data. Topics include collection and presentation of data, probability theory, measures of central tendency and variability, sampling distributions, estimation of parameters, and principles of hypothesis testing. Introduction to a statistical software package. PREREQUISITE: MATH 1211 or higher.

2711. Business Statistics II. (3). Emphasis on statistical analysis and decision making. Topics include nonparametric models, index numbers, analysis of variance, simple and multiple correlation and regression, and time series analysis. Extensive computer applications are used for decision support. PREREQUISITE: ISDS 2710.

2750. Introduction to Management Information Systems with Computer Applications. (3). Introduction to major concepts in business information systems. Students will be required to solve business problems utilizing computer in an on-line interactive environment. PREREQUISITE: MATH 1211.

2760. Applications Program Development I. (3). Introduction to computer programming in a business environment. Emphasis on structured design, development, testing, implementation, and documentation using COBOL. PREREQUISITE: COMP 1900 or ISDS 1240 or approval by department chairman.

MANAGEMENT

PROFESSOR THOMAS R. MILLER, Chair
Room 202, Fogelman Business and Economics Building

In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

H550 MANAGEMENT (MGMT)

1010. Introduction to Business. (3). Acquaintance with major institutions and practices in business and coverage of elementary concepts of business. Survey of functional areas of business and the activities of management. Provides orientation for selection of major and information on business career opportunities. NOTE: If taken by students with 25 hours or more, credit will not count for BBA degree.

3110. Organization and Management. (3). Comprehensive survey of management functions, basic concepts, and management principles. Includes coverage of planning and decision making, organizing, directing, and controlling. Focuses on coordination of organizational resources to achieve objectives.

3510. Production and Operations Management I. (3). Operations as a key element of organizational strategy from a competitive viewpoint. Integration of various techniques to facilitate solution to productivity and quality issues in both manufacturing and service industries using multifunctional approaches in the creation of goods and services. PREREQUISITE: ISDS 2711.

3750. Applications Program Development II. (3). Development of programs and systems of programs utilizing sequential and random access file structures and processing techniques. Emphasis on structured design, development, testing, implementation and documentation. PREREQUISITE: ISDS 2760.

3760. Operations Research. (3). Introduction to decision making, concentrating on problem solving technique. Emphasis on problem definition, model construction, and various solution techniques including linear programming, project analysis and control, queuing methods, and simulation. PREREQUISITES: ISDS 2711 and 2750, or equivalent.

3765. Advanced Operational Research. (3). Continuation of ISDS 3760. Computer use in solving management problems; computer solution of linear and goal programming problems, inventory and simulation problems. PREREQUISITES: ISDS 3760, COMP 1900, MATH 1312.

3770. Systems Analysis Methods. (3). (MGMT 2780). Overview of systems development life cycle. Emphasis on current systems documentation through use of classical and structured tools and techniques for describing process flows and data flows, data structures, file and input/output design and program specifications, data gathering and information reporting activities, transition from analysis to design. PREREQUISITE: ISDS 2750.

3775. Business Data Management. (3). (MGMT 4755). Focus on (1) designing, writing, and debugging programs written in a high-level language for common business applications involving direct access files; (2) selecting appropriate file organization; (3) designing data models; and (4) evaluating Commercial Data Base Management Systems. PREREQUISITE: ISDS 1240 or COMP 1900 or 3 hours in a programming language.

3790. Business Telecommunications. (3). Introduction to business telecommunications concepts and terminology. Topics include decentralization of computer processing, communication links, communications-oriented hardware and software, network design, and network management. PREREQUISITE: ISDS 2750.

4110-19. Special Topics in Management Information Systems and Decision Sciences. (3). Topics varied and announced in *Schedule of Classes*. PREREQUISITE: consent of instructor.

4430. Word Processing Applications. (3). (ADOS 4430). Emphasis on operation of magnetic media automatic typewriters and visual display word processing equipment. Training in equipment operations and applications design; simulated office and word processing projects. PREREQUISITE: ISDS 1230 or equivalent.

4510. Production and Operations Management II. (3). Emphasis on entire production system including interface with engineering, role of materials management, relationship to data base management, and problems of systems coordination. Master planning, value analysis, and organizational aspects of production environment critically examined. PREREQUISITES: MGMT 3110, ISDS 3510.

4511. Materials Management. (3). In-depth course in planning and control of materials requirements. Order point models and systems and requirements planning techniques studied. Aggregate inventory management, distribution, inter-plant inventories, and design of materials management systems emphasized. PREREQUISITES: MGMT 3110, ISDS 3510.

4512. Productivity Management. (3). Total systems perspective toward analyzing productivity issues that affect organizational performance. Importance of correctly defining and measuring productivity and supporting activities to maintain it. PREREQUISITE: ISDS 3510 or consent of instructor.

4711-6711. Intermediate Statistical Analysis. (3). In-depth study of business decision making using advanced statistical concepts including additional probability distributions, use of samples and sample design, non-parametric methods, and advanced techniques of analysis through use of correlation

analysis and analysis of variance. Computerized statistical programs utilized to solve complex problems. PREREQUISITES: ISDS 2711, 2750.

4760. Business Simulation Methods. (3). Fundamentals of computer simulation as a business decision making tool; use of existing programs and languages, stressing applications to specific problems. PREREQUISITE: ISDS 3765.

4765. Decision Support Systems. (3). Computer systems designed to support managers in decision-making process, development of interactive management science models and role of these models in decision support systems. PREREQUISITES: ISDS 3760, 3775.

4770. Structured Systems Analysis and Design. (3). (MGMT 3780). Advanced study of structured systems development. Emphasis on strategies and techniques of structured analysis and structured design for producing logical methodologies aiding in dealing with complexities in development of information systems. PREREQUISITES: ISDS 3750, 3775.

4780-6780. Applied Software Development Project. (3). Application of programming and systems development concepts, principles and practices to a comprehensive system development project. Team approach used to analyze, design and document realistic systems of moderate complexity. Use of project control techniques, formal presentations and group dynamics in development of information system. Development of database to support system. PREREQUISITES: ISDS 3770, 3775.

4785. Information Systems Resource Management and Planning. (3). Broad overview of information systems management function with particular attention to planning, organizing and controlling user services and to managing computer information systems development process. PREREQUISITE: ISDS 3775.

4790-6790. Management Information Systems. (3). Problems and techniques concerning design and installation of responsive systems brought together; special attention to executive use of system's product. System approaches utilizing current planning and control models studied through current literature and texts in computer field. PREREQUISITES: ISDS 2750 and one college level mathematics course; junior standing, or permission of instructor.

4795. End User Computing: Managerial Concepts and Applications. (3). Theory, methodology, and application tools necessary to management of end user computing environment; emphasis on management aspects of the unique environment; advanced techniques of pertinent application tools commonly found in end user environment as crucial to management of end user computing. PREREQUISITE: ISDS 3775.

4910. Management Information Systems and Decision Sciences Problems. (1-3). Approved research projects in student's major area under supervision of staff members. PREREQUISITES: senior standing and permission of department chair.

4911. Internship in Management Information Systems and Decision Sciences. (1-6). Internship in business organization to gain on-the-job experience. Project approved and supervised by department faculty. Credit allowed only after acceptance of report. PREREQUISITES: senior standing and a minimum Q.P.A. of 2.75.

MARKETING

PROFESSOR

ROBERT L. BERL, Chair

All course prerequisites listed below must be completed with grade of C or better. Any exception to prerequisites requires written permission of department chair.

In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000 level courses in The Fogelman College of Business and Economics.

Course numbers followed by an (F) are offered in the Fall semester; by an (S) are offered in the Spring; and by an (Su) are offered in the Summer. Courses not indicated by the above are offered on an as needed basis.

H560 MARKETING (MKTG)

3010. (F,S,Su). Principles of Marketing. (3). Comprehensive study of structure and functions of marketing system in the firm, economy, and society. Includes analysis of target markets, environments, and managerial aspects of marketing practices. PREREQUISITE: ECON 2120.

3011. (F,S,Su). Marketing Fundamentals for Nonbusiness Majors. (3). Overview of basic concepts used in marketing. Emphasis on application to nonbusiness situations and use by individuals in nonbusiness careers. NOTE: Credit will not count for B.B.A. degree.

3012. (F,S,Su). Consumer Behavior. (3). Why consumers behave as they do. Psychological and sociological theories and principles applied to current marketing problems. PREREQUISITE: MKTG 3010 or 3011.

3140. (F,S,Su). Advertising and Sales Promotion. (3). Introduction to field of advertising including agencies, media, layout, copy, typography; emphasis on various media associated with sales promotion and on need to coordinate entire promotional mix. PREREQUISITE: MKTG 3010 or 3011.

3170. (S,Su) Advertising Management. (3). Case study of advertising functions, emphasizing determination of advertising strategy; planning of creative strategy; planning of media strategy; evaluation of advertising results and introduction to organization and management of advertising function. PREREQUISITE: MKTG 3140.

3320. (S,Su) Retailing Fundamentals. (3). Changing concepts of retailing from management viewpoint. Principles that underlie successful operation of enterprises distributing products and services to ultimate consumers. PREREQUISITES: MKTG 3010 or 3011; ACCT 2010.

3410. (F,S,Su) Sales Fundamentals. (3). Basics of personal selling: preparation, personality development, communications, sales interview techniques, ethics, and career opportunities. Selling skills developed via sales presentations, role playing, audio-visual self-observation, and use of sales aids. PREREQUISITE: MKTG 3010 or 3011; MKTG 3012 recommended but not required.

3610. (F,S,Su) Physical Distribution. (3). Physical distribution system within an organization. Emphasis on transportation, customer service, inventory, warehousing and packaging functions. PREREQUISITE: MKTG 3010 or 3011.

3620. (F,S) Transportation and Logistics Systems. (3). Economic, social and political aspects of transportation system of the United States. Interrelationships among transportation, physical distribution, logistics, marketing, production, and financial management as they impact flow of raw materials and finished goods through the firm. PREREQUISITE: MKTG 3610.

3630. (F) Transportation Management. (3). Detailed analysis of freight traffic function within firm's logistics system. Includes rate and classification systems, claim liability, shipping document procedures, carrier selection, and other aspects associated with organizing and operating traffic department. PREREQUISITE: MKTG 3610.

4080. (F,S,Su) Marketing Research. (3). Research methods and procedures used in field of marketing to help solve business problems. PREREQUISITES: ISDS 2711, 2750, and 6 hours of marketing including MKTG 3010 or 3011.

4150. (F) Advertising Media and Campaigns. (3). Characteristics and uses of media by companies, products lines and reasons for selection. Last part of semester devoted to development of campaign for particular firm. PREREQUISITE: MKTG 3140.

4210. (F) Industrial Marketing. (3). Marketing to organization buyer (includes business, governmental, and institutional buyers). All aspects of marketing mix (including personal selling) and marketing research as applied to industrial marketing. PREREQUISITE: MKTG 3010 or 3011.

4220. (F) Purchasing. (3). Policies for effective and efficient procurement of goods and services for today's industry. Close attention to measurement and evaluation of purchasing performance. PREREQUISITE: MKTG 3010 or 3011.

4410. (F,S,Su) Sales Management. (3). Sales management functions of recruiting and hiring, training and assimilating, planning, controlling and motivating, and sales analysis. Role of personal selling in promotional mix and sales objectives of management. PREREQUISITE: MKTG 3010 or 3011.

4440. (S) Marketing Forecasting and Analysis. (3). Techniques of forecasting and analysis including objectives and applications of various types of research. Computer applications of forecasting packages. PREREQUISITES: MKTG 3010 or 3011; ISDS 2711.

4530. (F,S,Su) International Marketing. (3). Bases and promotion of foreign trade; international marketing organizations and methods; technical and financial features of international marketing. PREREQUISITE: MKTG 3010 or 3011.

4620. (S) Carrier Management. (3). Problems confronting managers of transportation companies. Includes carrier organization, operations, marketing strategies, finance, control, sales, labor relations, and shipper-carrier interaction. PREREQUISITE: MKTG 3610.

4692. Seminar in Transportation and Logistics. (3). Problems in transportation and logistics. PREREQUISITE: MKTG 3610.

4901. (F,S,Su) Management of Marketing Strategies. (3). Comprehensive study of marketing strategies and how implemented. Computer games and cases as well as "real-world" problems to illustrate application of marketing concepts in practical manner. PREREQUISITES: MKTG 3012, 3610, 4080. Student must be in last semester prior to graduation.

4910. Problems in Marketing. (1-3). Students carry on approved research projects in their major area under supervision of staff member. PREREQUISITES: senior standing and permission of department chair.

4911. Marketing Internship. (1-6). Internship in business organization to gain on-the-job experience. Project to be approved by department chair and supervised by departmental faculty member. Credit allowed only after acceptance of student's written report by department chair and supervising faculty member. PREREQUISITES: senior standing and minimum Q.P.A. of 2.75.

4920-29. Special Topics in Marketing. (3). Topics are varied and announced in *Schedule of Classes*. May be repeated once with change in topic. PREREQUISITE: consent of department chair.

The College of Communication and Fine Arts

RICHARD R. RANTA, B.S., M.A., Ph.D., Dean
Room 232, Communication Fine Arts Building

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
Art	Art	(1) Art Education (2) Graphic Design (3) Interior Design (4) Ceramics, Painting, Sculpture, Printmaking (5) Photography	Bachelor of Fine Arts (B.F.A.)
	Art History		Bachelor of Arts (B.A.)
Journalism	Journalism	(1) Advertising (2) Broadcast News (3) News Editorial (4) Public Relations	Bachelor of Arts (B.A.)
Music	Music	(1) Performance (2) Sacred Music (3) Composition (4) Music Theory (5) Music History (6) School Music (Instrumental) (Choral)	Bachelor of Music (B.M.)
	Commercial Music	(1) Music Business (2) Recording Technology (3) Jazz and Studio Performance (4) Jazz and Studio Composition/ Arranging	Bachelor of Music (B.M.)
Theatre and Communication Arts	Theatre and Communication Arts	(1) Broadcasting (2) Communication (3) Film Studies (4) Film and Videotape Production (5) Theatre	Bachelor of Arts (B.A.)
	Theatre	(1) Performance (2) Design and Technical Production (3) Dance	Bachelor of Fine Arts (B.F.A.)

PHILOSOPHY

The College of Communication and Fine Arts is ultimately focused upon visual and audible symbols, whose rational and emotional values it is the mission of the college to create and explore. In the belief that perception is largely shaped by experience, The College of Communication and Fine Arts offers a range of symbolically rendered experiences, both individual and collective, in the hope of broadening and sensitizing the perceptions of its students.

The kind of symbolic experience which communicates emerges when, in Ruskin's phrase, "the hand, the head and the heart of man go together." Students in The College of Communication and Fine Arts receive individual and small group instruction toward this end. In the hope of furthering the capacity to impose a pattern on experience and to recognize the patterns offered by others, students of the college are additionally exposed to courses drawn from a broad base of the liberal arts.

The faculty of the college represents a diversity of academic and artistic backgrounds and interests, reflected not only in its teaching, but also in research and creative activities. It is a faculty united in the attempt to maintain the highest standards in both classroom and studio work, standards which find their limits at last only in the mystery and wonder of the human experience from which they rise.

PURPOSES

The College of Communication and Fine Arts has four primary functions. First, it offers courses of study aimed at preparing its students to work toward careers in the fine or applied arts, communications, or the performing arts, whether as practitioners, teachers, artists, or consultants. Second, the college affords broad exposure and instruction in fine arts and communication to students of other colleges in the university whose degree programs may be enhanced by such exposure. Third, with a view toward individual professional growth as well as general cultural enhancement, the college vigorously promotes both scholarly research and artistic production on the part of its faculty. Finally, the college seeks to enrich the cultural atmosphere of both the university and the community at large through a continuing variety of public programs, to include art exhibitions, media presentations, dramatic productions, concerts, recitals, lectures, seminars, debates, workshops, festivals, and the like.

Through the diversity of these constituent elements, the college reflects the unity and challenge facing the communicative artist and scholar. Ultimately it is our goal to foster a more intense and profound awareness of the broad range of human experience

from which the college derives its pertinence and vitality.

ORGANIZATION

The College of Communication and Fine Arts comprises four academic departments: Art, Journalism, Music, and Theatre and Communication Arts. The requirements for the majors and minors offered by these departments are listed later in this section.

RESIDENCE REQUIREMENTS

University residence requirements are explained in detail in the *Graduation from the University* section. A transfer student in The College of Communication and Fine Arts must earn at least 6 semester hours in residence in the major subject and at least 3 semester hours in the minor. These credits may be earned only through regular class enrollment for a letter grade.

TEACHER PREPARATION

Students enrolled in a degree program of The College of Communication and Fine Arts who wish to prepare themselves for teaching careers in the secondary schools of Tennessee may meet the state licensure requirements while pursuing their chosen majors. Detailed licensure requirements are outlined under Requirements for Teacher Certification in the *Graduation from the University* section. An application to enter the Teacher Education Program must be filed with the College of Education General Advisor.

Students entering the university as first time freshmen who wish to prepare for teaching careers in the fields of music or art, will be required to complete a five-year program. This program will result in the student first receiving a baccalaureate degree in the College of Communication and Fine Arts and then a Master of Arts in Teaching degree through the College of Education. Recommendation for licensure is contingent upon completion of the Master of Arts in Teaching degree program.

This program replaces previous Bulletin options for majors in music or art education. Students should consult with their major advisors in the Departments of Music or Art for information about this program and to insure that all requirements for the teaching endorsement, general education and professional studies are completed.

DEGREE REQUIREMENTS

Degrees Offered

A student may earn a Bachelor of Fine Arts, Bachelor of Music, or Bachelor of Arts degree, by majoring in one of the four departments which comprise The College of Communication and Fine Arts. The following is an outline by departments of all majors and concentration areas offered by the departments in the College of Communication and Fine Arts.

A minimum grade of C is required in every course applicable toward a major or minor.

Every student should be aware that the mere completion of courses outlined below with a grade of C or better does not guarantee classification as a major or minor in the discipline concerned; *the student must be recommended by the chair of the department in which the major or minor is sought*. If, in the opinion of the chair, the quality of the student's work is not high enough, additional work, the repetition of courses, or other evidences of superior scholarship may be required.

Elective credit in the College of Communication and Fine Arts may be granted for validated learning from experience or non-traditional instruction. Guidelines for this procedure may be obtained in the office of the Dean of the College of Communication and Fine Arts.

The college requires two semester hours of physical activity course(s). A student may elect to take the course on a credit/no credit basis. Only students in the following programs may apply more than 8 semester hours of physical activity courses toward the specified minimum degree requirement: B.F.A. Theatre major with a concentration in Performance or Dance, B.A. Theatre/Communication Arts major concentrating in Theatre, or a Theatre or Dance minor. In addition to PHED 1000 level courses, MUAP 2002, DANC 1821, 1825, 1827, 2821, 2825, 2827; or THEA 2501 may be selected to fulfill the physical activity requirement.

BACHELOR OF FINE ARTS (IN ART)

The Bachelor of Fine Arts in Art is a professional degree. The requirements provide the student a greater opportunity for specialization in art than the other baccalaureate programs.

The specific degree requirements are divided into five groups: (1) general education, (2) basic art courses, (3) courses in one of the five concentration areas, (4) elective courses in art and (5) elective courses other than art to bring the total to 139 semester hours.

Advanced Placement Credit: A score of three (3), four (4) or five (5) points on the Advanced Placement General Portfolio or the Drawing Portfolio will entitle a student

to have his/her portfolio reviewed for the possible award of up to three credit hours. If a student submits art for two separate Advanced Placement portfolios (junior and senior years), a maximum of six credit hours may be awarded. For a grade of three (3) points in the Drawing Portfolio or three (3), four (4) or five (5) points in the General Portfolio, three hours of unassigned studio elective credit may be awarded. For a grade of four (4) or five (5) points in the Drawing Portfolio, three hours of basic art credit in ART 1311 (Beginning Drawing) will be considered. To determine how Advanced Placement credit will be awarded, all Advanced Placement portfolios must be reviewed within the department for consistency with standards appropriate to the performance level and range of enrolled students.

Retention: Sophomore Review is required of all students with a concentration in Art Education; Graphic Design; Ceramics, Painting, Printmaking, and Sculpture; Interior Design; or Photography. Students must meet the Sophomore Review requirement either during the completion of the last three hours of basic studio courses or during the next regular semester following completion of basic studio requirements: ART 1201, 1204, 2201, 2202, 1311, 1314, 2313. Satisfactory completion of the Sophomore Review is a prerequisite for continuing as an art major, and fulfilling requirements for graduation. If a student does not initially pass the Sophomore Review, the requirement must be met during the next semester in which the student is enrolled in the university. Transfer students at the sophomore level or above must meet the Sophomore Review requirement in the semester following completion of basic studio courses. These required courses may be satisfied either through transfer credit or by courses taken at Memphis State University. Guidelines and procedures for Sophomore Review are available in the department office upon request. Students seeking a B.F.A. degree should complete the following required sequence of basic art courses as well as general university requirements: FRESHMAN YEAR - ART 1201 (3), ART 1311 (3), ART 1204 (3), and ART 1314; SOPHOMORE YEAR - ART 2201 (3), ART 2313 (3), and ART 2202 (3). ART 2101 and 2102 may be taken any time during the first four semesters.

Graduation: For the B.F.A. degree, a total of 139 semester hours is required for graduation, 90 of which must be in professional course work. A minimum of 42 upper division semester hours is required for this degree. A minimum grade of C is required in all art courses.

1. General Education Courses

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321, 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage: Not required for students who meet all B.F.A. in Art requirements for graduation.

Historical/Philosophical Heritage (6 hours): One course from pre-1500: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from post-1500: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, FOLS 4405; SOCI 3422.

Social Science (6 hours): One course from list A and one course from list A or B:

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMCE 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (8 hours — Sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (3 semester hours): COMP 1200, a course of study approved by the dean, or by passing an approved computer literacy examination. *Art Education students will take EDUC 3600.*

2. Basic Art Courses (39 hours)

ART 1311, 1314, 2313; 1201, 1204, 2201, 2202; 2101, 2102.

Art History: 12 upper division semester hours in art history courses; no more than 3 hours of museum studies may be used to satisfy this requirement. (Interior Design students must take ART 3103, 3104; Graphic Design students must take ART 4224; Art Education students must take two courses from ART 4151, 4154, or 4156; Photography students must take ART 4721, 4722; and two elective courses in Art History.)

3. Concentration Areas:

a. **Ceramics, Painting, Printmaking, and Sculpture** (42 hours):

ART 2314, 4321; 3523, 3524, 4521, 4522; 2351, 3351, 4351; 2511, 3511, 4511; 3331, 3332, 4331, 4332; 4621, 4622; 4611.

NOTE: Selection of fourteen (14) appropriate courses from the nineteen (19) courses listed above.

b. **Graphic Design** (45 hours):

ART 2213, 2221, 2222, 2351, 2701, 3213, 3221, 3222, 3312, 4221, 4222, 4223, 4232 or 4233, 4341, 4611.

c. **Interior Design** (42 hours):

ART 2233, 2234, 3233, 3234, 3235, 3236, 3237, 3238, 3312, 4237, 4238, 4239, 4240, 4611.

d. **Art Education** (39 hours):

ART 2351, 2511, 3523, 4321, 4322, 4424; 3411, 3421, 4410, 4611; EDUC 2600, 2601, 3000, 3001, 4701.

e. **Photography** (33 hours — Degree requirements catalog: Fall 1988 or any subsequent valid catalog for

students with accredited college credit prior to Fall 1989):

ART 2701, 2702, 3701, 4701, 4702, 4703, 4704, 4711 (6 hours), 4712 (6 hours).

4. Art Electives to complete the total of 90 semester hours.

5. Elective Courses other than art to complete the total of 139 semester hours. These courses will be chosen by the student in consultation with his advisor and the chair of the Department of Art.

BACHELOR OF FINE ARTS (IN THEATRE)

The Bachelor of Fine Arts degree is a program specifically designed for students whose *certain* interests and abilities *strongly* suggest the potential for pursuing careers as artists in the resident, professional, community, or academic theatre. To expand the student's creative powers and deepen the commitment to a vocation in the theatre, the B.F.A. program offers the student (1) a basic probing of all the arts and crafts of the theatre; (2) an exploration in depth of one area of special interest; (3) the opportunity to participate creatively as a theatre artist through extensive production experience. Three areas of specialization are offered: I. Performance, II. Design and Technical Production, and III. Dance. Students entering the B.F.A. program will elect one of these three areas for concentrated study. The student will normally begin specialized training at the end of the sophomore year.

Admission and Retention Criteria: Admission and retention in the B.F.A. program in Theatre are based on selective procedures in the form of portfolio reviews held yearly and/or auditions held twice yearly. Following their audition/interview or portfolio review/interview, applicants will be notified as to whether they have been accepted into the program, accepted for one more semester on a probationary basis, or advised to pursue another degree.

(1) **Performance:** Admission and retention in the Performance concentration are based on an audition and interview. In addition to the interview, the student is expected to present an audition which will consist of a group dance audition and presentation of two monologues from plays of distinctly different styles and/or periods. The total time of the monologues may not exceed five minutes.

(2) **Design and Technical Production:** Admission and retention in the Design and Technical Production concentration are based on portfolio review and interview. In addition to the interview, the student is expected to submit a portfolio of artistic and production work. This may consist of photographs, sketches, costume plates, elevations, lighting plots, ground plans, etc.

(3) **Dance:** Admission and retention in the Dance concentration are based on an audition and interview. In addition to the interview, the student is expected to

participate in a group audition designed to demonstrate dance technique and performance skills.

Retention: The fact must be emphasized that admission to the B.F.A. curriculum does *not* imply a student's permanent tenure in the program. Beyond the audition interview or portfolio review, the student's active participation in the co-curricular activities of the department will be assessed by the theatre faculty. Artistic growth, development of technical facility, and continuing commitment to creative excellence on the part of the student will be evaluated. Permission to continue in the program will be based on this evaluation.

Transfer of Credit: In certain cases students may be admitted to an advanced level of the B.F.A. program. Such admission will be based upon: (1) an audition and interview; (2) the student's previous course work in theatre, particularly in the area of special interest; (3) the student's previous involvements in production experience; (4) letters of recommendation from former Theatre Arts instructors and/or directors. Even if admitted to an advanced standing, the student will be required to remedy previous course deficiencies.

Advising: Upon admission to the B.F.A. program, each student will be assigned a faculty advisor. For this degree, 136 semester hours are required for graduation. A minimum grade of C is required in all theatre courses applicable to the major. The student must maintain an overall quality point average of 2.0.

1. General Education Courses

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321, 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (6 hours): Select one course from list A and one course from list A or B:

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (8 hours — Sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus one physical activity course from the following: DANC 1821, 1825, 1827, 2821, 2825, 2827; THEA 2501.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **PREREQUISITE:** Satisfac-

tory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **PREREQUISITE:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **PREREQUISITE:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: COMP 1200, a course of study approved by the dean, or by passing an approved computer literacy examination.

2. Basic Theatre Core Courses (36 hours):

THEA 1411, 1551, 1561, 2501, 2511, 2531, 3412, 3541 (2), 3542 (4), 4551 or 4552, 4582, and COMM 2381.

3. Concentration Areas

Performance, Design and Technical Production, and Dance. Individual concentration course sequence to be determined in conference with student's advisor. Emphasis in specific areas will determine sequence structure. **FOR EXAMPLE:**

a. Performance

THEA 2532, 3212, 3213, 3411, 3505, 3506, 3531, 3532, 3541 (3), 3542 (1), 4455, 4457, 4521, *4541 (6), 4551 or 4552 (to complement theatre history core requirement); elective courses chosen in conference with the student's advisor.

b. Design and Technical Production

THEA 2512, 3511, 3542 (2), 3561, 3562, *4541 (6), 4550 (9), 4551 or 4552 (to complement theatre history core requirement), 4560 (9), 4564, 4591, 4592; elective courses chosen in conference with the student's advisor.

c. Dance

DANC 1151, 2101, 2821, 2825, 3101, 3201, 3829 (16), 4101, 4201, 4301 (1-3); plus select two from among THEA 3505, 3506, 4502; *4541 (3); elective courses chosen in conference with the student's advisor.

***NOTE:** THEA 4541 Internship (see course description section.) The intent of this requirement and course is to provide the student experience in a full-time theatre production situation. Off-campus participation (usually following the junior year) is an essential element of the B.F.A. degree program. Details are to be planned in advance in conference with the student's advisor.

BACHELOR OF MUSIC (IN COMMERCIAL MUSIC)

The Bachelor of Music degree in Commercial Music is designed for students whose interests and abilities indicate a strong potential for significant achievement in music industry. Four concentrations available are: Jazz and Studio Performance; Jazz and Studio Composition/Arranging; Music Business; and Recording Technology.

Admission: Admission is based on selective procedures, and admission to the university does not guarantee placement in the Commercial Music Program. Stringent quality control is essential; therefore, an assessment is required of all students desiring to enter the program. Entrance requirements vary by concentration. Specific admissions criteria may be obtained through the office of the Chairman, Department of Music. Through the admissions procedure, preliminary estimates of student commitment and potential success can be made. Upon admission, the student will be assigned a CMUS advisor.

Retention: The student's progress and continued potential will be reviewed twice yearly by the appropriate Commercial Music faculty. Permission to continue in the program will be based upon this evaluation. Retention criteria may be obtained through the office of the Chairman, Department of Music.

Piano Proficiency: All students concentrating in Studio/Live Performance and Composition/Arranging with the exception of keyboard majors, must pass the Commercial Music piano proficiency examination prior to their last semester in the program.

Experiential Learning: Credit may be awarded for validated learning from experience or non-traditional instruction. Students who wish to apply for credit for experiential learning may obtain guidelines for this procedure from the Dean of the College of Communication and Fine Arts. (See *Fees and Charges*, for related fee information.)

Graduation from the Program: Graduation requirements vary by concentration. For students in the Music Business and Recording Technology concentrations, a minimum of 139 hours is required for graduation; a minimum grade of C and a quality point average of 2.5 are required in all courses in the core and concentration. For students in the Composition/ Arranging and Studio/Live Performance concentrations, a minimum of 139 hours is required for graduation; a minimum grade of C and a quality point average of 3.0 are required in all courses in the core and concentration.

1. General Education Courses (40-42 hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321, 2000. **NOTE:** *Students in Music Business and Recording Technology MUST take MATH 1312.*

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage: Not required for students who meet all B.M. requirements for graduation.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (3 hours): ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

Natural Science (8 hours — Sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.



Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: COMP 1200, a course of study approved by the dean, or by passing an approved computer literacy examination.

2. Commercial Music Core Courses (24 hours)

MUTC 1008 (3), 1009 (3), 1010 (1), 1011 (1), 2008 (3), MUHL 3302 (3); MUSE 1105 (2); CMUS 1116 (2), 2101 (3), 4602 (3)

3. Concentration Areas

a. Jazz and Studio Performance (75-76 hours)

MUTC 2010 (1), 3008 (3), 3009 (1); CMUS 2102 (3), CMUS 3802 (4), 3828 (2); MUAP 1000 (4); MUHL 4802 (3); one of the following (3-4): CMUS 3100, 3101, or COMM 3823; CMUS 4897 (3) (23-24)

Individual lessons on a major instrument or voice of which a minimum of 4 hours must be in upper division courses (16)

Instruction on a secondary instrument or voice (piano majors take MUAP 2511) (2)

MUAP 3010 (8)

MUAP 3011 (4)

MUAP 3103 (6)

MUAP 3825 (3)

MUAP 3826 (3)

MUAP 3827 (3)

MUAP 4103 (3)

These courses have separate sections for voice and instrumental students.

b. Jazz and Studio Composition/Arranging (75-78 hours)

MUTC 2010 (1), 3008 (3), 3009 (1); CMUS 2102 (2), CMUS 3802 (4), 3828 (2); MUAP 1000 (4); MUHL 4802 (3); one of the following (3-4): CMUS 3100, 3101, COMM 3823; CMUS 4897 (4) (23-24)

Major instrument or voice (7)

MUSE 1101 (2), 1104 (2), 1116 (2); MUAP 1312 (2) (pianists take MUSE 1111); MUAP 1411 or 1412 (2) (percussionists take MUSE 1111); MUTC 2501 (2), 2511 (2), 4201003 (2); two semesters each of MUAP 3010, 3011, 3103 (vocalists may take MUAP 3601); CMUS 2501 (2), 2502 (2), 3501 (2), 4102 (3), 4501 (3), 4502 (3) (38-39)

Two of the following: CMUS 3801, 3825, 4103, 4603; MUTC 4201004 (5-6)

c. Music Business (75 hours)

CMUS 3100 (3), 3101 (3), 3103 (3), 3801 (2), CMUS 3802 (4), 4504 (3), 4603 (3), 4804 (3), 4898 (4); MUAP 1000 (2), Applied Music Instruction (8); one of the following: MUHL 4801 (3) or 4802 (3); COMM 4811 (3), 4812 (3), 4831 (3); FIR 3011 (3), 3410 (3), 4440 (3), 4870 (3); ACCT 2010 (3), 2020 (3), 3010 (3); MGMT 2710 (3); elective to bring the total to 139 hours.

d. Recording Technology (75 hours)

CMUS 3100 (3), 3101 (3), 3103 (3), CMUS 3800 (4), 3801 (2), 4603 (3), 4800 (4), 4802 (4), 4803 (4), 4804 (3), 4805 (3), 4898 (4); MUAP 1000 (2), Applied Music Instruction (8); one of the following: MUHL 4801 (3) or 4802 (3); COMM 3821 (3), 3823 (4), 3824 (4), 4812 (3); FIR 3011 (3), TECH 1811 (3); electives to bring the total to 139 hours.

BACHELOR OF MUSIC (IN MUSIC)

The Bachelor of Music with a major in Music is a professional degree, the requirements for which provide the student with an opportunity for specialization in the traditional disciplines of music and music education. A minimum grade of C is required in every graded course applicable toward the major. The student must maintain an overall quality point average of 2.0. **Exception:** School Music concentration: (1) overall quality point average of 2.25; (2) quality point average no less than 2.25 in all courses taken at Memphis State University excluding all credit transferred from other institutions; (3) quality point average no less than 2.5 in all music courses; (4) quality point average no less than 2.5 in all required professional education courses; (5) grade of C or above in each professional education and music course. The specific degree requirements are divided into five groups: (1) general

education, (2) basic music courses, (3) courses required for the specific emphasis chosen by the student, (4) music electives and (5) elective courses other than music and music education to bring the total of semester hours taken to 132 (134 for school music concentration). All students must complete a minimum of 42 hours at the upper division level. Transfer students must complete at least 30 semester hours of music and/or music education courses at the upper division level at Memphis State University.

Admission: All applicants seeking admission as freshman music majors or as transfer students must complete and submit to the Admissions Office of Memphis State University an appropriate formal application form. In addition to academic considerations, admission to the music degree program requires a personal interview and an audition. The audition consists of (1) performance in the student's major applied area, (2) a music theory examination and (3) a piano placement exam. Candidates are accepted on the basis of accomplishment, potential and suitability for the concentration they wish to pursue. Students seeking admittance as music majors in the fall term should apply no later than *August 1*, and those seeking admittance in the spring term should apply no later than *December 1*. Additional information on specific audition requirements and on interview/audition appointments may be obtained through the office of the Department of Music.

Degree Requirements (figures in parentheses indicate semester hours credit):

1. General Education Courses (32-45 hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321, 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage: Not required for students who meet all B.M. requirements for graduation.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500:** CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580, plus one course from **post-1500:** HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (3 hours): ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304. **NOTE:** Students in School Music MUST take PSYC 1101

Natural Science (8 hours — Sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course, DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190,

3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: COMP 1200, a course of study approved by the dean, or by passing an approved computer literacy examination.

2. Basic Music Courses (37.5-42 hours)

MUTC 1008, 1010, 1009, 1011, 2008, 2010, 3008, 3009, 3010, 3101, 3102 (MUTC 3102 not required in School Music concentration) (22)
MUHL 3301,3302, History of Music (6)
MUSE 3700 Basic Conducting (2)

Large Musical Organizations: A minimum of eight semesters of large ensemble is required of music majors. (Exceptions to this policy are pianists with concentration in Performance and guitarists who are required to have a minimum of 6 semesters of large ensemble.) Generally, wind and percussion performers are to participate in an instrumental ensemble; string performers are to participate in orchestra; and vocal, keyboard, and guitar performers are to participate in a choral organization unless assigned to a large instrumental ensemble. Transfer students lacking sufficient large ensemble credits may partially fulfill their large ensemble requirements by simultaneously enrolling in a small ensemble with a maximum of 2 credit hours of small ensemble applicable to the total large ensemble requirement. Ensemble assignments are based on audition and may be repeated. Any exception to this general ensemble assignment policy will be made after a review of petitions by the departmental chair, the appropriate ensemble director, and the applied teacher.

Piano Proficiency: All music majors must take a piano placement examination prior to enrolling in applied music courses. This evaluation will place students in the appropriate piano class (MUSE 1105, 1106, 2107, 2108) to develop the skills necessary to pass the Piano Proficiency Examination. All students in the Bachelor of Music (in Music) degree program must pass the Piano Proficiency Examination before the beginning of the senior year. This may be done in either of two ways: (1) by completing MUSE 2108 or (2) by passing without credit the piano proficiency exam given once each semester. Piano proficiency requirements vary according to the area of concentration. A verification will be mailed to the student and to appropriate officials upon completion of the examination. After successful completion of this examination, music students whose major instrument is not piano may audition for major group or private instruction in piano.

Applied Music Workshop: MUAP 1000 is required of all music majors for eight semesters.

3. Major: Music

Concentration Areas (choose one):

a. Performance (45-60 hours).

Instruction in performance leading to the Bachelor of Music in Music with a concentration in Performance is provided for the following areas: Trumpet, Horn, Trombone, Tuba, and Euphonium (Brass Instruments); Piano, Harpsichord, and Organ (Keyboard Instruments); Percussion; Violin, Viola, Violoncello, Bass, Guitar, and Harp (String Instruments); Flute, Oboe, Clarinet, Saxophone, and Bassoon (Woodwind Instruments); and Voice.

Individual instruction in major performance area (28)

Instruction in secondary performance area: (6)

For Brass Instruments: 2 hours each in individual instruction in two secondary brass

instruments; group instruction in woodwind instruments.

For Woodwind Instruments: 2 hours each in individual instruction in two secondary woodwind instruments; group instruction in brass instruments.

For Percussion: group instruction in brass instruments; woodwind instruments, and string instruments.

For String Instruments: 2 hours each in individual instruction in 2 secondary string instruments; 2 hours in appropriate pedagogy or repertory courses.

For Keyboard Instruments and Voice: 6 hours in appropriate courses in repertory, pedagogy, vocal diction, and accompanying.

Music History elective: Choose from MUHL 4001, 4005, 4407, 4408, 4500, 4801, 4802 in consultation with major advisor (3)

Music Theory elective: Choose from MUTC 4201 sections 002, 003, 004, 006, or 007 in consultation with major advisor. (2-3)

Junior Recital (1)

Senior Recital (1)

Small Ensembles (4-6)

4 semesters of small ensembles, chosen from those listed under "Small Ensembles and Chamber Music" in consultation with the major advisor, is required. 6 hours of MUAP 3301 (Chamber Music for Pianists) is required of students in Piano.

For students in Voice, 6 hours each in two of the following languages which must be different from the admission requirement languages: French, German, or Italian. (12)

b. Sacred Music: (37-43 hours)

Individual Instruction in Voice or Organ (16)

MUSA 4104, 4105 Sacred Music in History and Practice I & II (6)

MUSE 4701 Choral Conducting (2)

MUSA 4106 Children's Choirs in the Church (3)

Senior Recital (1)

For students in Voice:
MUSE 1111 Guitar Class (2)
Small Ensembles (4)
Music Electives (4)

For students in Organ:

Individual instruction in Voice (4)

MUSA 4101 Service Playing (3)

MUHL 4005 History and Literature of the Organ (3)

Small Ensembles (2)

Music Electives (2)

c. Composition: (47 hours)

Individual instruction in applied music to include two semesters of piano (8)

MUTC 2501 Composition (2)

MUTC 2502 Composition (4)

MUTC 4501 Composition (at least four semesters) (8)

MUTC 4511 Intermediate Electronic Music (2)

MUTC 4512 Advanced Electronic Music (2)

MUTC 4201 Studies in Music Theory and Composition (9)

002 Sixteenth Century Counterpoint (3)

003 Eighteenth Century Counterpoint (3)

004 Twentieth Century Counterpoint (3)

007 Advanced Orchestration (3)

MUTC 4101 Twentieth Century Compositional Techniques (3)

MUSE 3702 Score Reading (3)

MUHL 4408006 Twentieth Century Music (3)

MUTC 4599 Senior Composition Recital (1)

MUAP 3402 Contemporary Chamber Players (2)

d. Music Theory: (47 hours)

Individual instruction in applied music, at least 8 hours of which must be in piano (12)

MUTC 4502 Composition for Non-composition Majors (3)

MUTC 4201 Studies in Music Theory and Composition (15)

002 Sixteenth Century Counterpoint (15)

003 Eighteenth Century Counterpoint (15)

004 Twentieth Century Counterpoint

005 Pedagogy of Theory

006 Analytic Techniques

007 Advanced Orchestration

MUTC 4203 Critical Studies in Music (3)

MUTC 4101 Composition Techniques of the Twentieth Century (3)

MUSE 3702 Score Reading (3)

MUSE 4700 Instrumental Conducting or MUSE 4701 Choral Conducting (2)

Upper division Music History (6)

e. Music History: (45 hours)

Individual instruction in applied music (10)

MUSE 3702 Score Reading (3)

MUTC 4201 Studies in Music Theory and Composition (10)

002 Sixteenth Century Counterpoint (2)

003 Eighteenth Century Counterpoint (2)

Advanced Music History (12)

Foreign language: 12 semester hours in addition to requirements for admission (12)

Collegium musicum (4)

f. School Music: (48-53 hours)

Core: (19-22 hours)

EDUC 2600 Human Development and Learning Theory (3)

EDUC 2601 Clinical Experience I (1)

EDUC 3000 Principles of Teaching (3)

EDUC 3001 Clinical Experience II (1)

EDUC 4701 Clinical Experience III (2)

MUSE 4203 Materials and Methods of Class room Music (3)

MUSE 4206 Music for Exceptional Children (3)

MUSE 1112, 1113 Class Instruction in Voice (2)

(not required of students enrolled in Applied Voice) (1)

Recital (1)

Instrumental Emphasis: (26-28 hours)

MUSE 1101, 1103, 1104, 1116 Class Instruction in Brass Instruments, Percussion Methods, Woodwind Instruments, Stringed Instruments (8)

MUSE 4204 Instrumental Music in Elementary and Secondary Education (2)

MUSE 4700 Instrumental Conducting (2)

MUSE 4205 Marching Band Techniques (2)

(not required of students who are String principals) (2)

Applied Music: Individual instruction in a major instrument: at least 4 hours must be taken at the upper division level (14)

Choral Emphasis: (25 hours)

MUSE 1115 Guitar and Recorder (2)

MUSE 4202 Materials and Methods of Music, Grades K-6 (3)

MUSE 4207 Choral Methods and Materials (2)

MUSE 4211 Vocal Diction (2)

MUSE 4701 Choral Conducting (2)

Applied Music: Individual instruction in voice or a major instrument; at least 4 hours must be taken at the upper division level (14)

4. Music Electives: at least 6 semester hours in upper division music courses selected from a concentration area other than the one chosen for the major.

5. Elective Courses to bring the total to a minimum of 132 semester hours (134 for students in School Music). These courses will be chosen by the student in consultation with his advisor and major professor.

BACHELOR OF ARTS

To qualify for the degree of Bachelor of Arts the student must complete a minimum

of 132 semester hours with a quality point average of 2.0. Of the 132 semester hours required for graduation, at least 42 semester hours must be in courses from the Upper Division. No more than 42 semester hours in any one subject will be counted toward a degree.

B.A. DEGREE REQUIREMENTS

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Foreign Language (6 hours): Two courses in a single foreign language at or above the 2000 level.

Mathematics (6-10 hours): MATH 1181 and 1182; or MATH 2000; or MATH 1312 or 1321; plus one additional course chosen from any MATH course numbered 1211 or higher, or PHIL 1611.

Literary Heritage (6 hours): ENGL 2201 plus one course chosen from: CLAS 3412, 3413, 3414; ENGL 3211, 3212, 3213, 3214, 3221, 3222, 3321, 3322, 4231, 4232, 4233, 4241, 4242, 4251, 4252, 4321, 4322, 4323, 4341, 4342, 4371, 4411, 4412, 4423, 4424, 4441, 4451, 4461; FREN 3411, 4412; GERM 3411, 3412, 4443, 4451, 4465; GREK 3111, 3511, 3911, 4441; LALI 4010, 4491, 4492, 4493; LATN 3111, 3211, 3912, 4411, 4711; RUSS 3412, 3441, 3442, 3443, 3444; SPAN 4410, 4431, 4432, 4501, 4561, 4562; THEA 4582.

Fine Arts Heritage (6 hours — must select two different disciplines): One course from: ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551; plus one course from the previous list or from: ART 2101, THEA 4551, THEA 4552, DANC 3101, MUHL 4800.

Historical/Philosophical Heritage (6 hours): One course from pre-1500: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from post-1500: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (12 hours): One course from list A, one course from list A or list B, and two courses from lists A, B, or C (no more than 6 hours from any one discipline):

A. ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

B. ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1100, SOCI 1100.

C. COMM 1780; CJUS 3510; GEOG 3430, 4304, 4305, 4313, 4324, 4431; HIST 4871; JOUR 1700; POLS 3213, 3216, 3506; SOCI 1112, 3401, 3432, 3701, 3831, 3860, 4442, 4631, 4923.

Natural Science (11-12 hours): One sequence from list A plus one course in a different science chosen from list A or list B:

A. BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; UNIV 1610, 1611.

B. GEOG 3221, 4121, 4131, 4201, 4211, 4411; PHYS 2111.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. PREREQUISITE: Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. PREREQUISITE: Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: This requirement may be satisfied by taking COMP 1200, by course of study approved by the dean, or by passing a university-approved computer literacy examination.

Major: Completion of requirements for one of the majors listed below.

Electives: to bring the total to 132 semester hours.

MAJORS (Choose one)

ART HISTORY

The Major: 36 semester hours in art history courses, including ART 2101, 2102, 4611, and one upper division course each from five of the following art history categories: Ancient, Medieval, Renaissance, Baroque, Modern European, American, and non-European art. A minimum of 6 hours in studio art is also required.

ART

The Major: None available. (See B.F.A. degree.)

The Minor: 24 semester hours in art courses, 9 of which must be from the upper division.

PHOTOGRAPHY

The Major: None available. See B.F.A. degree.

The Minor: 18 semester hours as follows: ART 2701, 2702, 3701, 4701, 4702, and 4721.

JOURNALISM

NOTE: Sophomore standing or permission of instructor required for courses at the 2000 level and above. JOUR 2121, which requires typing proficiency, is a prerequisite for journalism majors taking more advanced writing courses in the program. Prerequisite courses, including JOUR 2121, must be completed with a minimum grade of C before moving on to any course in the program to which the prerequisites are applied.

Students majoring in journalism may select only one concentration and may not simultaneously complete, within the 132 hours required for the Bachelor of Arts degree, the concentration in film and videotape production within the theatre and communication arts major. Of the 132 hours required for graduation, 90 hours must be other than journalism or journalism skills related courses. Twelve semester hours in a secondary area of emphasis, outside the Department of Journalism, approved by the student's advisor, is recommended.

In order to be in compliance with the Accrediting Council on Education in Journalism and Mass Communication accreditation standards, MSU will accept no more than 12 semester hours or the equivalent in journalism courses for transfer from community colleges to be applied toward the degree.

The Major:

Journalism Core (required of all students majoring in journalism-12 to 15 hours): JOUR 1700, 2121, and 4700. Advertising and Public Relations students will also take one of the following: 4702, 4708, 4710, or 4712. News Editorial and Broadcast News students will take two of the following: 3700, 4702, 4708, 4710, or 4712.

Completion of one of the following concentrations:

ADVERTISING (27 hours): JOUR 3300, 3322, 3324, 3335, 3345, 3400, 4327, 4328; MKTG 3010 or 3011.

BROADCAST NEWS (19 hours): JOUR 3625, 4120, 4629, 4639; COMM 3801, 3821.

NEWS EDITORIAL (18 hours): JOUR 2123, 3123, 3720, 3900, and one of the following combinations: JOUR 3125 and 4120; JOUR 3205 and 4214; or JOUR 2520 and 3525.

PUBLIC RELATIONS (42 hours): JOUR 3400, 3410, 3421, 3422, 3900, 4420, and 4440; COMM 2381, 3322, and 3802; MGMT 3110, 4420; and MKTG 3010 or 3011; and one of the following: JOUR 3123, 3205, 3625, 3720.

The Minor: Students may qualify for a minor in general journalism by completing 18 semester hours in

journalism courses, including JOUR 1700, 2121, 4700, and 9 additional semester hours selected from the upper division.

Practical experience is available to all journalism students on *The Helmsman*; *The DeSoto*, University yearbook; or in one of the following activities: University Public Information Office, Athletic Publicity Office, Alumni Publicity Office, Photo Service Department. Qualified majors will be chosen for senior-year internships with Memphis newspapers, magazines, advertising-public relations agencies, and broadcasting stations.

MUSIC

The Major: None. (See B.M. degree.)

The Minor: (25 hours)

MUTC 1008, 1010, 1009, 1011, 2008, 2010 (12 hours)

MUHL 3301, 3302 (6 hours)

Individual instruction in voice or an instrument, four semesters (4 hours)

Large ensemble: two semesters (2 hours)

MUAP 1000 Applied Music Workshop: two semesters (1 hour)

THEATRE AND COMMUNICATION ARTS

The Major:

All students must take THEA 1551 and COMM 2381 and fulfill the requirements for one of the following concentrations:

Select one of the following concentration areas:

BROADCASTING: 34 semester hours, including COMM 3800; 4857; three of: 4810, 4811, 4812, 4831, 4871; three of: 3322, 3300, 3371, 3861, 4011, 4013, 4704, 4853, 4854; one of: 3820, 3821, 3823.

COMMUNICATION: 36 semester hours, including COMM 1780; 3321; 4381; one of: 3322, 4704; two of: 4011, 4013, 4341, 4375; and 12 additional hours in Communication.

FILM STUDIES: 30 semester hours, including COMM 3321 or 3322; COMM 4850; 3 of: COMM 4220, 4851, 4853, 4856, 4858; and 15 additional hours in Communication or Theatre.

FILM AND VIDEOTAPE PRODUCTION: 33 semester hours, including COMM 3321 or 3322; 3823; 3824; 3842; 4824; 4825; two of: 4220, 4850, 4851, 4853, 4854, 4856, 4858; and six additional hours in Communication.

THEATRE: 33 semester hours including: THEA 1411, 1561, 2501, 2511, 2531, 3412, 3541 (2), 3542 (4), 4551 or 4552, 4582, and three required elective hours in Theatre. NOTE: No more than three additional elective hours may be selected from Theatre or Communication areas.

The Minor: Any student wishing to minor in any area (Communication Arts, Theatre, Dance, Theatre and Communication Arts) in the Department of Theatre and Communication Arts should see the department chair who will assign an appropriate advisor. The minor must consist of at least 18 hours of approved coursework, 9 of which must be upper division. Coursework for all minors will be determined by the student in conference with the advisor with the approval of the department chair.

HONORS PROGRAM

The Honors Program offers superior students the opportunity to engage in an intensive and individualized course of study leading to a Bachelor of Arts or Bachelor of Fine Arts degree with Departmental Honors. The program enables honors students to develop their particular talents, interests, and abilities within a curriculum designed to encourage academic independence and creativity.

Admission: To be eligible for admission into the Honors Program, a student must meet the following requirements: (a) the completion of 55 semester hours of college course work (or Junior standing), (b) an overall quality point average of 3.25 or better, (c) a departmental quality point average of 3.25 or better, and (d) the completion of the 6 hours of core requirements in the department (COMM 2381 and THEA 1551). Students who have not met all of these requirements may apply for admission into the program, and their applications will be considered on a "provisional admittance" basis.

Applications may be obtained from the Director of the Honors Program or from the main office of the department. Completed applications should be submitted to the Director of the Honors Program at least two weeks before the end of each semester. Students may be admitted to the program at the end of any semester including summer semesters.

Requirements: To graduate with departmental honors, an honors student must fulfill the following requirements:

- a) The completion of at least 18 hours of honors work. Twelve of these hours must be in upper division departmental honors work, and a maximum of 6 hours may be in lower division or extra-departmental honor work.
- b) The completion of an honors project or thesis in the senior year.
- c) The maintenance of an overall grade point average of 3.0 and a departmental grade point average of 3.25.

An honors student may earn departmental undergraduate honors credit in three ways: (1) by taking 6000 or 7000-level courses in the department under the THCA 4980 designation, "Honors Studies" (for a maximum of 15 hours credit); (2) by taking THCA 4999, "Senior Honors Thesis" (for a maximum of 6 hours); and by taking THCA 4982, "Honors Seminar" (for a maximum of 9 hours) for a combined total of no more than 18 hours. This will allow honors students to enroll in those departmental seminars which most specifically reflect their particular interests in theatre and communication. An honors student majoring in any field of concentration in the department will be able to substitute honors credit for certain track requirements for graduation. Contracting for honors credit in other courses or enrolling in Independent Study or Special Problems courses will not fulfill Honors Program requirements.

After completing 6 hours of Honors Studies, honors students may begin work on their projects or theses. These projects will be under the direct supervision of the Director of the Honors Program, although students may ask any member of the departmental faculty to sit on their committees (three faculty members will sit on each student's committee). Typically, an honors student earns 6 hours of credit for the project, 3 of which reflect a semester of research or preparation, while the final 3 hours reflect a semester of writing or assembling the project. The honors project does not have to be a thesis; the nature of the project will depend on the student's interests, talents, and course work and will be decided on an individual basis by the Director of the Honors Program.

For further information about the Honors Program, contact the chair, Department of Theatre and Communication Arts.

Communication and Fine Arts Course Descriptions

K100 COMMUNICATION/FINE ARTS (CCFA)

Students who wish to apply for credit for experiential learning may obtain guidelines from the Dean of the College of Communication and Fine Arts. Fees for this credit are listed in *Fees and Charges*.

1900-1999. Introductory Level Experiential Learning in (descriptive title).

2900-2999. Intermediate Level Experiential Learning in (descriptive title).

3900-3999. Advanced Level Experiential Learning in (descriptive title).

ART

ASSOCIATE PROFESSOR
CAROL CROWN, Chair
Room 201, Jones Hall

Transfer students seeking advanced standing in art are required to submit a portfolio.

In addition to specific prerequisites, junior standing or permission of the instructor is a prerequisite for all 3000 and 4000 level courses in the Department of Art.

K020 ART (ART)

1101. Introduction to Art. (3). Fundamental principles of artistic expression as basis for understanding Western and non-Western traditions in the visual arts. G.

201. Basic Design. (3). Basic design factors of line, value, texture, form, and space in problem solving approach to stimulate student's visual perception and encourage inventive manipulation of tools, materials, and techniques. Development of vocabulary for professional practice encouraged through lectures, discussions, and class critique.

204. Color Fundamentals. (3). Light and color in relation to form. Mixing of colors and notation of hue, value, chroma relationships. Interaction of color; color harmony, psychology, and symbolism in a variety of mediums. PREREQUISITE: ART 1201.

311. Beginning Drawing. (3). Study of still life and nature to develop perception of line, value, space, and volume. Use of contour and gesture.

314. Figure Structure. (3). Analysis and rendering of the human form, including work from skeleton and on female or male models; study of anatomy and proportion. Emphasis on contour, gesture, value, and volume. PREREQUISITE: ART 1311.

101. World Art I. (3). Development of visual arts from prehistoric times through medieval period, their use by man as social, cultural, and educational force; brief survey of art of Far East.

2102. World Art II. (3). Continues (but does not presuppose) World Art I; development of visual arts from medieval period through Renaissance to present.

2201. Design I. (3). Continued study of the elements of design, using variety of materials and methods. PREREQUISITES: ART 1201 and 1204, or permission of instructor.

2202. Design II. (3). Continuation of ART 2201; attention to three-dimensional problems. PREREQUISITE: ART 2201 or permission of instructor.

2213. Typographic Design I. (3). Terminology, technology, and design aspects of typography for effective communication. PREREQUISITE: ART 2201 or permission of instructor.

2221. Graphic Production and Processes I. (3). Introduction to materials and processes of graphic design with attention to manual skills necessary to prepare camera-ready art. PREREQUISITE: ART 1204, 1314 or permission of instructor.

2222. Graphic Production and Processes II. (3). Photo-mechanical reproduction, proofing methods, and printing processes. PREREQUISITE: ART 2221 or permission of instructor.

2233. Interior Drafting Practices. (3). (2231). Introduction to equipment, standards and requirements of interior design drafting practices through lectures and studio space planning assignments. PREREQUISITES: ART 1201, 1311, 1314; or permission of instructor.

2234. Interior Color and Composition. (3). (2232). Application of color theory and design-composition to specific requirements of interior design practice, through lectures and studio assignments. PREREQUISITES: ART 1204, 2201, 2233; or permission of instructor.

2313. Drawing and Composition. (3). Problems in visual communication; emphasis on compositional and technical considerations. Analytical and objective investigations of organizational problems. Use of varied graphic media and methods. PREREQUISITES: ART 1311 and 1314, or permission of instructor.

2314. Drawing and Concept. (3). Problems in visual communication; emphasis on personal expression. Conceptual and subjective investigation of individual problem-solving strategies. Use of varied graphic media and methods. PREREQUISITE: ART 2313 or permission of instructor.

2351. Introduction to Printmaking. (3). Printmaking processes: relief, intaglio, planography, and stencil, focusing on relief and screenprinting.

2511. Sculpture I. (3). Introduction to basic materials and techniques of sculpture.

2701. Photography I. (3). (3224). Basic techniques and processes of black and white still photography. History and aesthetics of photography as fine art. Emphasis on personalized perception and seeing photographically.

2702. Photography II. (3). (4224). Exploration of black and white still photography as means to personal expressive statement and self-discovery. Initial emphasis on portraiture. PREREQUISITE: ART 2701 or permission of instructor.

3103. History of Furniture and Interiors I. (3). (3101). Emphasis on Baroque, Rococo and Neoclassical periods in Europe and America.

3104. History of Furniture and Interiors II. (3). (3102). 19th and 20th century survey; emphasis on development of period revivals, Art Nouveau, Art Deco, International Style and other innovations in Europe and America.

3213. Typographic Design II. (3). Advanced problems involving visual organization and typography as an expressive design element. PREREQUISITE: ART 2213 or permission of instructor.

3221. Graphic Design I. (3). Fundamentals of visual thinking and techniques for generation of ideas for effective visual communication. PREREQUISITE: ART 2202, 2213, 2222; or permission of instructor.

3222. Graphic Design II. (3). Emphasis on intellectual processes underlying design practice. PREREQUISITE: ART 3221 or permission of instructor.

3225. Computer Graphics. (3). Hands-on training in use of graphics hardware and software in design and production of commercial graphics, illustrations and animation.

3233. Components of Interiors. (3). (3231). Introduction to resources of interior furnishings industry through lectures and studio assignments: wall and floor coverings; drapery fabrics and upholstery. Development of estimates for wall coverings and window treatments. PREREQUISITES: ART 1204 and 1311, or permission of instructor.

3234. Interior Design Studio I. (3). (3232). Application of material covered in basic interior design courses to theoretical designs for complete environments. Space planning and furnishing studies developed through studio assignments. PREREQUISITES: ART 2233, 2234, 3235, 3236, 3237; or permission of instructor.

3235. Commercial Lighting Design. (3). (4234). Comprehensive study of lighting sources and principles, color and applications, including circuiting, switching, dimming systems, task-ambient lighting and industry resources. The Lumen Formula and Area Method of design applied through studio assignments and lectures. PREREQUISITES: ART 2233, 2234, 3233; or permission of instructor.

3236. Rendering for Interiors. (3). (4233). Comparative application of variety of techniques using black-white and color mediums for interior perspective illustration. Lectures and studio assignments in line, texture, shade-shadow, volume, color and free-hand drawing. PREREQUISITES: ART 2233, 2234, 3312; or permission of instructor.

3237. Interior Construction Drafting. (3). (4551). Principles of building construction and their application through drafting for both residential and commercial installations. Building methods and materials studied through lectures and studio assignments. PREREQUISITE: ART 2233 or permission of instructor.

3238. Interior Cabinetwork Drafting. (3). (4552). Principles of cabinetworking, wood joints, laminating, contouring and hardware required for their application

to detail drafting for both commercial and residential custom design. Drafting procedures studied through lectures and studio assignments. PREREQUISITE: ART 3237 or permission of instructor.

3312. Isometric/Perspective Drafting Techniques. (3). Axonometric drawings, gridded and non-gridded perspective systems; tools and techniques for creation of rough and finished design and presentation drawings.

3313. Painting I. (3). Preliminary course in theory and practice of oil painting.

3312. Painting II. (3). Continuation of ART 3313; attention to essentials of still-life, landscape, and portrait painting.

3315. Intaglio Printmaking. (3). In-depth study of metal plate intaglio printmaking processes: engraving, drypoint, etching, aquatint. Introduction to color intaglio and mixed media including relief printing. Emphasizes personal expression. PREREQUISITE: ART 2351 or permission of instructor.

3352. Lithography (3). In-depth study of stone lithography. Introduction to aluminum plate litho; color litho, and mixed media color printing. Emphasizes personal expression. PREREQUISITE: ART 2351 or permission of instructor.

3411. Art for Children. (3). Introduction to skills and methods for instructional art programs in studio and art appreciation activities; emphasis on materials and ideas for children's art expression and development.

3413. Materials and Methods in Teaching Elementary School Art. (3). Aid to future teachers in understanding child art, encouraging art expression, and preparing art teaching materials for children. PREREQUISITES: ART 1101 (or 2101 and 2102) and 3411.

3421. Art for Adolescents. (3). Instructional art programs for adolescents; includes equipment, supplies, processes and ideas for adolescents' art expression and development.

3511. Sculpture II. (3). Problems of sculptural form as expressed in metal, wood, and related materials.

3512. Sculpture III. (3). Continuation of ART 3511; emphasis on techniques.

3523. Ceramics I. (3). Introduction to clay and ceramic process. Emphasis on thoughtful, purposeful exploration of medium, regarding both pottery vessel and nonvessel object.

3524. Ceramics II. (3). Continuation of ART 3523. Some consideration to fundamental historical and aesthetic aspects peculiar to ceramics as a studio medium.

3701. Photography III. (3). Continuation of ART 2702. Closer examination of several key photographers' work as point of departure for student work. How student work relates to traditions. PREREQUISITE: ART 2702, junior standing, or permission of instructor.

4010-19-6010-19. Special Topics in Studio Art. (1-3). Topics are varied and announced in *Schedule of Classes*. May be repeated to a maximum of 9 hours when topic varies.

4020-29-6020-29. Special Topics in Art Education. (1-3). Topics are varied and announced in *Schedule of Classes*. May be repeated to a maximum of 9 hours when topic varies.

4030-39-6030-39. Special Topics in Art History. (1-3). Topics are varied and announced in *Schedule of Classes*. May be repeated to a maximum of 9 hours when topic varies.

4111-6111. Art and Archaeology of Egypt. (3). Pre-dynastic to Late Period. PREREQUISITE: ART 2101 or permission of instructor. [W].

4112-6112. Egyptian Art and Archaeology in the Old and Middle Kingdom. (3). Art, architecture, and archaeology, 3000-1500 B.C. PREREQUISITE: ART 2101 or permission of instructor.

4113-6113. Egyptian Art and Archaeology in the New Kingdom and Late Period. (3). Art, architecture, and archaeology, 1500-332 B.C. PREREQUISITE: ART 2101 or permission of instructor.

4115-6115. Introduction to Egyptian Hieroglyphics. (3). Grammar and translation of beginning Middle Egyptian.

4116-6116. Intermediate Egyptian Hieroglyphics. (3). Grammar and translation of Middle Egyptian texts. PREREQUISITE: ART 4115.

4121-6121. Ancient Art of the Near East. (3). Architecture, sculpture, painting and the minor arts in Mesopotamia, Anatolia, and Syria-Palestine. PREREQUISITE: ART 2101 or permission of instructor.

4123-6123. Greek Art. (3). Architecture, sculpture and painting from the Bronze Age to the end of the Hellenistic period.

4124-6124. Roman Art. (3). Architecture, sculpture and painting from Etruscan Rome to the fall of the Empire.

4125-6125. Art and Archaeology of Pompeii. (3). Pompeii's excavations, art, artifacts and architecture in reconstructing ancient Roman daily life. [W].

4131-6131. Early Christian and Byzantine Art. (3). Development of architecture, sculpture, and painting through early medieval period; emphasis on Early Christian and Byzantine Art. PREREQUISITE: ART 2101 or permission of instructor.

4134-6134. Romanesque and Gothic Art. (3). Development of architecture, sculpture, and painting from Carolingian (Proto-Romanesque) Period through Gothic Period. PREREQUISITE: ART 2101 or permission of instructor. [W].

4141-6141. Art of the Early Renaissance in Italy. (3). Architecture, sculpture and painting of Italy, 1300-1510. PREREQUISITE: ART 2101 or permission of instructor.

4142-6142. Northern Renaissance Art. (3). Fifteenth Century Art in Northern Europe; emphasis on panel painting, manuscript illumination and printmaking. PREREQUISITE: ART 2101 or permission of instructor.

4143-6143. Art of the High Renaissance in Italy. (3). Sixteenth Century Art in Italy; highlights works of Michelangelo, Raphael, Titian, and the Mannerists. PREREQUISITE: ART 2102 or permission of instructor. [W].

4146-6146. Baroque Art. (3). Architecture, sculpture, and painting produced in Europe during Seventeenth Century. PREREQUISITE: ART 2102 or permission of instructor.

4151-6151. Nineteenth Century Art. (3). Art movements of Nineteenth Century from NeoClassicism to Impressionism. PREREQUISITE: ART 2102 or permission of instructor.

4154-6154. Modern Art. (3). Major developments in European painting and sculpture from 1890's until World War II, includes Fauvism, Cubism, and Surrealism. PREREQUISITE: ART 2102 or permission of instructor.

4156-6156. Art Since 1945. (3). Major art movements and contemporary schools of criticism from World War II to present. Major trends examined include Abstract Expressionism, Pop Art and Earth Art. PREREQUISITE: ART 2102 or permission of instructor.

4158-6158. Modern Architecture. (3). Survey of 19th century styles, 20th century masters, and contemporary developments in architecture; includes historic preservation.

4162-6162. Latin American Art. (3). Hispanic arts of the Americas from 1500 to the present in relation to Iberian and Indian traditions.

4163-6163. Pre-Columbian Art. (3). Ancient art of Mexico, Central America and South America from about 1000 B. C. to European contact.

4166-6166. Art of the United States. (3). (4167, 4168). Survey of American painting, sculpture and art theory from colonial period to 1945. PREREQUISITE: ART 2102 or permission of instructor.

4181-6181. Primitive Art. (3). Traditional styles of African, Oceanic, and North American Indian art considered in relation to their cultural contexts.

4201-6201. Advanced Design — Plastics I. (3). Two-dimensional and three-dimensional design in plastics employing basic methods of casting resins and thermoheating processes using sheet, rod, and tube plastics.

4207-6207. Advanced Color. (3). In-depth study of contemporary color concepts for designers and practicing artists. Personal exploration of phenomena of color perception in relation to color organization according to individual student's professional goals.

4208-6208. Advanced Design — Special Problems. (3). Contemporary design issues within mid-south region with specific design fields to be offered by professional designers working in a broad scope of specializations and serving as guest/resident/or

adjunct faculty on rotational basis, when feasible. PREREQUISITE: permission of instructor.

4221-6221. Graphic Design for Print Communications. (3). Practical problems in areas of publication, information, corporate and promotional design. PREREQUISITE: ART 3222 or permission of instructor.

4222-6222. Graphic Design for Video Communications. (3). Study and execution of graphics for television, incorporating computer animation and design for the video environment. PREREQUISITE: ART 4221 or permission of instructor.

4223-6223. Specialized Studies in Graphic Design. (3). Advanced instruction in either illustration, typography and publication design, 3-dimensional design, or corporate and promotional design. May be repeated to a maximum of 12 hours when topic varies. PREREQUISITE: ART 4221, 4341; or permission of instructor.

4224-6224. History of Graphic Design. (3). Cultural, theoretical, and stylistic aspects of major movements in the field of graphic design in Europe and America from Industrial Revolution to present.

4231-6231. Professional Practices: Graphic Design. (3-12). Instruction by a graphic arts practitioner in one of these professional settings: design and concept, copy preparation, advertising graphics, or commercial photography. May be repeated to a maximum of 12 hours with approval of the advisor when topics vary, but not for the purpose of improving a grade previously earned.

4232-6232. Visual Design Business Practices. (3). Application of principles, procedures, and business practices of visual design. PREREQUISITE: junior standing or permission of instructor.

4233-6233. Design Practice Studio. (3). Work under faculty supervision on projects for institutional and corporate clients; assist in developing publications, exhibits, signage and other graphics, and participate in professional design process from project inception to completion. May be repeated to a maximum of 12 hours with approval of advisor, but not for the purpose of improving a grade previously earned. PREREQUISITE: senior standing. Admission by portfolio review only.

4237-6237. Interior Design Studio II. (3). (4231). Advanced interior design. Comprehensive studio assignments including space planning, construction lighting and complete furnishings specifications with samples, concluding with class presentation by student designer. PREREQUISITES: ART 3234, 3235, 3236, 3237; or permission of instructor.

4238-6238. Interior Design Studio III. (3). (4232). Further advanced studio assignments in commercial and residential interior design, with class presentations PREREQUISITES: ART 3238, 4237; or permission of instructor.

4239-6239. Interior Design Business Practices. (3). (4235). Study and application of principles, procedures and business practices of interior design. Contracts letters of agreement, work orders, business forms and specification writing developed in conjunction with lectures and studio assignments. PREREQUISITE: ART 3234 or permission of instructor.

4240-6240. Interior Design Internship. (3). (4236). Approved on-the-job apprenticeship experience with cooperating employer in an interior design firm's studio, retail store or designer showroom handling product of interior furnishings industry. Student's training evaluated by employer and interior design faculty. PREREQUISITE: ART 2233, 2234, 3234; or permission of instructor.

4321-6321. Drawing and Painting I. (3). Advance drawing and painting methods; emphasis on transparent watercolor. PREREQUISITE: ART 2313 or permission of instructor.

4322-6322. Drawing and Painting II. (3). Continuation of ART 4321; attention to various mixed media. PREREQUISITES: ART 2313, 4321; or permission of instructor.

4331-6331. Painting III. (3). Advanced problems in oil painting, presupposing that student has mastered basic techniques and is ready for a more experimental approach to subject. PREREQUISITES: ART 333, 3332; or permission of instructor.

4332-6332. Painting IV. (3). Continuation of ART 4331; emphasis on development of personal style. PREREQUISITES: ART 3331, 3332, 4331; or permission of instructor.

4341-6341. Illustration. (3). Survey of many areas requiring services of illustrator and including preparation of book, magazine, advertising, and television illustrations.

4351-6351. Advanced Printmaking I. (3). Specialization in one or two printmaking media with emphasis on development of personal imagery and technical skills. PREREQUISITES: ART 2351, 3351 or 3352; or permission of instructor.

4352-6352. Advanced Printmaking II. (3). Advanced work in one or two printmaking media with continued development of personal imagery and advanced technical skills. PREREQUISITES: ART 2351, 3351 or 3352, and 4351; or permission of instructor.

4380-6380. Museology. (3). (Same as ANTH 4380). History and development of museums; mandate and variety of institutions; significant research facilities; historical and contemporary collections, and educational roles of museums in contemporary society.

4381-6381. Art Curatorial Techniques. (3). Curatorial responsibilities and functions: receiving and shipping methods, registration, physical and environmental security, research, conservation, and study of art market and publications.

4382-6382. Museum Operation. (3). (Same as ANTH 4382). Basic aspects of museum organization, management, exhibit planning and execution, and maintenance of collections and records.

4384-6384. Museum Internship. (3). Approved internship with cooperating museum or gallery, emphasizing curatorial, program and/or operational duties. PREREQUISITES: permission of the instructor and one of the following or the equivalent: ART 4380, 4381 or 4382.

4410-6410. Art Education Independent Study. (1-3). Theoretical and pragmatic ideas relevant to teaching of art. May be repeated to a maximum of 6 hours. PREREQUISITES: ART 3411, 3421; or permission of instructor.

4421. Materials and Methods in Teaching Secondary School Art. (3). (Same as SCED 3321). Understanding adolescent art expression and preparing art teaching materials for secondary school art program. PREREQUISITES: ART 3421, 3523; or permission of instructor.

4424-6424. Woven and Constructed Fiber Design I. (3). Creating fiber craft objects and wall hangings primarily through weaving with multiple harness looms; fiber spinning and dyeing.

4425-6425. Woven and Constructed Fiber Design II. (3). Advanced loom weaving techniques and other fiber processes such as macrame, stitchery and applique. PREREQUISITE: ART 4424 or permission of instructor.

4511-6511. Sculpture IV. (3). Advanced work in various sculptural media. PREREQUISITES: ART 2511, 3511, 3512; or permission of instructor.

4512-6512. Sculpture V. (3). Continuation of 4511; emphasis on personal expression. PREREQUISITE: ART 4511 or permission of instructor.

4521-6521. Ceramics III. (3). Advanced studies in ceramic process and technique. Concentration on development of personal attitudes toward work.

4522-6522. Ceramics IV. (3). Technical competence and the production of ceramic objects reflective of genuinely personal involvement.

4531-6531. Jewelry I. (3). Jewelry-making; emphasis on materials and equipment. Nature and possibilities of metals, stones and other materials in terms of good jewelry design. Basic projects in enameling, soldering, pickling, buffing, and other techniques.

4532-6532. Jewelry II. (3). Second course in jewelry-making and metal-work. Study and practice in good design. Work in lost wax casting, champleve, cloisonne, and combinations of materials.

4611. Senior Problems. (3). Original research in student's area of concentration, extent of the project to be approved by art faculty.

4621-6621. Workshop in Art I. (3). Specific art problems as they apply to individual student; emphasis on basic art concepts and creative experience. PREREQUISITE: permission of instructor.

4622-6622. Workshop in Art II. (3). Continuation of ART 4621, providing study of problems appropriate to need of individual student. PREREQUISITE: permission of instructor.

4641-6641. Study and Travel in Art (3 or 6). Travel to important art areas of world and specialized study under direction of faculty member of Department of Art.

4650-6650. Professional Art Practices. (3). Development of skills needed for success as practicing professional artist, including portfolio preparation and presentation, marketing, contracts, copyrights, and alternative art careers.

4701-6701. Color Photography. (3). Exploration of photographic perception in color. Survey of history and aesthetics of color photography. Techniques of color photography; emphasis on color printing. PREREQUISITE: ART 2702, junior standing, or permission of instructor.

4702-6702. Photographic Materials and Processes. (3). Advanced technical course exploring creative potential in various contemporary and historical photography materials, processes and techniques. Emphasis on aesthetic application of those materials and techniques. PREREQUISITE: ART 2702 or permission of instructor.

4703-6703. Alternative Photographic Processes. (3). (3702). Exploration of creative potential of archaic and non-traditional photographic processes such as Cyanotype, Gum Bichromate and Kwik-Print. PREREQUISITE: ART 2702 or permission of instructor.

4704-6704. Photographic Lighting. (3). Advanced theory, technique, and equipment used by professional photographers for black and white and color. Emphasis on aesthetic application in actual practice. PREREQUISITE: ART 4701 or permission of instructor.

4711. Advanced Photography Seminar. (1-3). Supervised problems course. Emphasis on student's finding personal direction within own work, pursuing that direction, and discussing it in class critique. May be repeated to a maximum of 6 hours. PREREQUISITE: ART 3701 or permission of instructor.

4712. Photography Portfolio Seminar. (1-3). Student must make photographs which will be used to produce photography book or portfolio (bound by the student) which represents coherent, indepth picture statement, and will contain written introduction. May be repeated, not to exceed 6 hours. PREREQUISITE: ART 4711 or permission of instructor.

4721-6721. History of Photography. (3). Critical and aesthetic consideration of the photographic image from pre-history to 1945.

4722-6722. History and Criticism of Contemporary Photography. (3). Major styles and movements since 1945 from historical and critical perspectives with emphasis on critical writers such as Sontag, Barthes, and Kozloff.

of instructor. *One lecture/four laboratory hours.* PREREQUISITE: ART 2701.

3123. News Feature Writing. (3). Fundamentals of non-fiction feature writing for newspapers, magazines, company publications and broadcast news presentations. Story ideas, personality profiles, humor articles and complex, news-related features developed.

3125. Editing II. (3). Practical editing applications using computer for page makeup and design; emphasis on entire editing process combining text and visual material.

3205. Magazine Article Writing. (3) Free-lance writing techniques; preparation of queries and articles for submission; generation and research of ideas appropriate for magazine market. PREREQUISITE: JOUR 3123 or 3720 or permission of instructor. [W].

3300. Survey of Advertising. (3). (2300). Exploration of creative function of advertising; emphasis on role of media.

3322. Advertising Layout and Production. (3) Design and production of printed media with emphasis on the printed advertisement.

3324. Advertising Copy Writing. (3). Principles of advertising psychology in relation to proven techniques for writing effective copy; approximately half of course devoted to practice in writing copy and preparing rough layouts. Typing proficiency required.

3335. Advertising Sales. (3). Practical experience in preparation and selling of completed advertisements; students will work with own clients throughout semester. PREREQUISITE: JOUR 3322, 3324 or permission of instructor.

3345. Advertising Research. (3). Fundamentals in advertising research: nature of the market, appropriate advertising strategies, message effectiveness and media audiences. Primary and secondary research, sampling, questionnaire design, survey, and data processing and analysis. NOTE: *Must be taken prior to JOUR 4328.* PREREQUISITE: JOUR 3300.

3400. Introduction to Public Relations. (3). Development, scope, and modern role of public relations; emphasis on case studies, lectures, and experimentation with major public relations tools and practices.

3410. Public Relations Research. (3). (4410). Identifying, characterizing and evaluating stakeholder groups and alternative channels of communication. Formal research procedures include sampling, instrument design, information-gathering, data processing, analysis and reporting.

3421. Print Media in Public Relations. (3). Planning and budgeting, selection and development of public relations tools. Writing news releases. Writing and production of printed materials. PREREQUISITES: JOUR 2121, 3900, 3400, 3410, COMM 3322. [W].

3422. Electronic Media in Public Relations. (3). Planning and writing public relations copy for audio-visual presentations, radio, television, satellite-based communications networks, videotex, teleconferencing, computer-based communications and other electronic delivery systems. PREREQUISITES: JOUR 3400, 3410, COMM 3322, 3802.

3525. Advanced Press Photography. (3). Skills of visual communication. Assignments designed for relevance to covering daily news. Emphasis on picture stories, including text and layout. PREREQUISITE: JOUR 2520 or permission of instructor.

3625. Radio and Television News Writing and Editing. (3). Processing of news for radio and television; attention to present-day style used by electronic media. *Two lecture, two laboratory hours per week.* PREREQUISITE: JOUR 2121.

3700. History of Journalism. (3). Origin and development of American journalism; students who enroll should have completed HIST 2601 and 2602 or equivalent.

3720. Reporting. (3). Gathering news of university community with laboratory writing assignments PREREQUISITE: JOUR 2121.

3800. Journalism Seminar. (1). Weekly presentation by a media professional on a topic in his field of journalistic expertise. Students prepare for discussion sessions through assigned readings. May be repeated for a maximum of 2 hours credit. PREREQUISITE: junior standing.

3900. Computer Publishing Techniques. (3). Computer design and production of printed materials

JOURNALISM

PROFESSOR DAN L. LATTIMORE,

Chair

Room 300, Meeman Journalism Building

K260 JOURNALISM (JOUR)

1700. Survey of Mass Communication. (3). Social background, scope, functions, and organization of modern communication media; attention to all major mass communication media; philosophy and goals of modern journalism; impact on governmental, social and economic systems.

2121. Elementary News Writing. (3). Basic instruction in journalistic forms and style; use of computer in composition of news reports or articles and in solution of newswriting problems; laboratory writing exercises on computer; *one lecture, four laboratory hours per week.*

2123. Editing I. (3). Practice in headline writing, editing, and newspaper makeup and study of contemporary editing problems.

2200. The Magazine. (3). Historical backgrounds, contents, purposes, and readership of general magazines, business and industrial papers and specialized journals.

2520. Press Photography. (3) Taking pictures with news camera, developing film, making enlargements, cropping and scaling for publication. Students may bring their own cameras. Open to non-majors with permission

using desktop publishing software to create simple fliers, brochures and newsletters; one lecture, four laboratory hours per week.

4120. Reporting Public Issues. (3). Analyzing and writing news reports about government, courts, energy, economy, taxes, education, environment, medicine and science. Stresses relationship between current issues and public's need to be informed. Emphasis on topics vital to large urban society. PREREQUISITE: JOUR 3720 or 3625. [W].

4130. Writing Internship. (3). Work in practical assignments at local media under supervision of qualified practitioners. NOTE: Students who have received credit for JOUR 4330 or 4430 may not receive credit for JOUR 4130. PREREQUISITE: permission of department chair.

4214. Magazine Editing and Production. (3). (3214). Editing and production problems of magazines; emphasis on business, industrial, and home periodicals; headline and title writing; pictorial copy layout, staff organization; and production processes. PREREQUISITE: JOUR 3900 or permission of instructor.

4327. Media Planning. (3). Procedures for analyzing the advertising situation, writing advertising and media goals, and setting advertising appropriations. Use of a microcomputer program to develop and evaluate optimum advertising media schedules. NOTE: Offered only in fall term and must be taken prior to 4328. PREREQUISITES: JOUR 3300 and MKTG 3010 or 3011.

4328. Advertising Strategy. (3). Development of creative strategy and its execution to include layouts, audio tapes, slide shows, storyboards and sales promotion application. NOTE: Offered only in spring semester. PREREQUISITES: JOUR 3322, 3324, 3345, 4327.

4330. Advertising Internship. (3). Work under supervision of qualified practitioners in local advertising agency; advertising department of newspaper, television, or radio station; or company advertising department. NOTE: Students who have received credit for JOUR 4130 or 4430 may not receive credit for JOUR 4330. PREREQUISITES: JOUR 3322, 3324 and permission of department chair.

4420. Public Relations Case Problems. (3). (4423). Case studies and typical public relations problems. Planning and preparation of communications materials for various media; application of public relations techniques. PREREQUISITES: JOUR 3421, 3422.

4430. Public Relations Internship. (3). Work experience as intern with public relations department or organization; or on team project assigned by instructor. Experience includes analysis of public relations plan and evaluation of results. NOTE: Students who have received credit for JOUR 4130 or 4330 may not receive credit for JOUR 4430. PREREQUISITES: JOUR 4423 and permission of department chair.

4440. Public Relations Campaigns. (3). Application of theory, research data, and problem-solving techniques in the development of comprehensive public relations strategies. PREREQUISITE: JOUR 4420.

4629. Electronic Reporting. (3). Gathering and writing of news for all electronic media (radio-TV-cable). Emphasis on fundamentals of reporting and audio-video electronic newsgathering. PREREQUISITES: JOUR 3625; COMM 3821, 3801 OR COMM 3821, 3823, and 3824.

4639. Television Newsroom Production. (3). Producing, writing, editing and using electronic equipment to assemble a television newscast. Emphasis on performing the various tasks in a working newsroom. PREREQUISITE: JOUR 3625, COMM 3801 or permission of instructor.

4700. Mass Communication Law. (3). Origin and development of legal principles affecting freedom of expression and provisions of laws of libel, slander, copyright, and other statutes limiting communication in fields of publishing and broadcasting.

4702-6702. Current Issues in Journalism. (3). Advanced study of recent, critical problems faced by mass media and complexities which cause them.

4708-6708. Journalism Professional Ethics. (3). Classical approaches to ethics presented with their application to the day-to-day considerations a journalist must face in working with employers, local publics and the larger society which depends on a free and responsible press.

4710-6710. Mass Media and New Technology. (3). Scope of developing technology in mass media including cable, satellites, video recorders, video disks, lasers, optical fiber, videotext, computers and other communication devices. Industry considerations and effect of new technology on society.

4712-6712. International Mass Media. (3). Exploration of international communication, flow of news and propaganda; role in national development and international affairs; growth and impact of global journalism, television, advertising and public relations; comparison of media systems.

4800-09-6800-09. Special Topics in Journalism. (3). Intensive study of a single critical issue or current topic. May be repeated for a maximum of six hours credit.

4830. Directed Individual Study. (1-3). Independent study and research, or practicum, or project under supervision. May be repeated for a maximum of 3 hours credit. PREREQUISITE: prior approval of department chair.

1010. Aural Theory I. (1). (1004). Beginning ear training; scales intervals, triads, simple melodic lines and simple two part examples; sightsinging of combination of tonal and modal materials. COREQUISTE: MUTC 1008. PREREQUISITE: Theory placement exam. (S/U only).

1011. Aural Theory II. (1). (1005). Ear training involving triads in sequence, two part examples, modulatory melodies; sightsinging of 17th and 18th century melodic examples. COREQUISTE: MUTC 1009. PREREQUISITES: MUTC 1010, 1008. (S/U only).

2008. Music Theory III. (3). (1006). Continuation of four part structure, part writing and figured bass; expanded harmonic materials from ninth chords through chordal mutation; formal and chordal analysis from Bach through mid-19th century. COREQUISTE: MUTC 2010. PREREQUISITES: MUTC 1009, 1011.

2010. Aural Theory III. (1). (1006). Ear training involving expanded harmonic materials, modulatory melodies, two part examples with modulation; sightsinging of 18th and 19th century melodic examples. COREQUISTE: MUTC 2008. PREREQUISITES: MUTC 1011, 1009. (S/U only).

2501. Composition. (2). Class instruction in free composition; emphasis on smaller forms. May be repeated for additional credit. PREREQUISITE: MUTC 1008. NOTE: Composition taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is \$30.00 per semester.

2502. Composition. (2). Works for piano, voice, chorus, and small ensembles; study of style and analysis of works from music literature. May be repeated for additional credit. PREREQUISITE: MUTC 2501 or permission of instructor. NOTE: Composition is taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is \$60 per semester.

2511. Introductory Electronic Music. (2). Emphasis on basic techniques of electronic music composition through work in tape manipulation, synthesizer operation, musique concrete; history and aesthetics of electronic music. PREREQUISITE: MUTC 2008 or permission of instructor. FEE \$30.

3008. Music Theory IV. (3). (3001). Continuation of late 19th century harmonic structures; introduction of popular music and its notational symbols; introduction and use of 20th century techniques analysis and written examples from 20th century. COREQUISTE: MUTC 3009. PREREQUISITES: MUTC 2008, 2010.

3009. Aural Theory IV. (1). (3001). Ear training involving expanded 19th century harmonic considerations, 20th century chromaticism and pandiatonicism, two part examples from both 19th and 20th centuries; sightsinging emphasizing melodies of 20th century. COREQUISTE: MUTC 3008. PREREQUISITES: MUTC 2010, 2008. (S/U only).

3010. Aural Theory V. (1). (3002). Aural exploration of basic forms, cadences and styles of music; detailed aural analysis of modulatory elements within a piece. PREREQUISITES: MUTC 3008, 3009. (S/U only).

3101. Orchestration. (2). (3002). Basic study of instruments of orchestra and band; terminology and techniques pertaining to that study; practical application by scoring for small and large instrumental combinations. PREREQUISITES: MUTC 3008, 3009, or permission of instructor.

3102. Advanced Musical Analysis. (3). (3003). Theoretical analysis of large-scale compositions from Renaissance to present. PREREQUISITES: MUTC 3008, 3009.

4101. Compositional Techniques of the Twentieth Century. (3). (3003). Writing course employing harmonic and contrapuntal techniques and devices from Debussy to present.

4201. Studies in Music Theory and Composition. (1-3). Directed individual or class instruction in selected areas of music theory and composition chosen in consultation with instructor. May be repeated for credit as necessary to fulfill specific concentration requirements.

001 INDIVIDUAL STUDIES (1-3)
002 SIXTEENTH CENTURY COUNTERPOINT (2)
003 EIGHTEENTH CENTURY COUNTERPOINT (2)
004 TWENTIETH CENTURY COUNTERPOINT (2)
006 ANALYTIC TECHNIQUES (3)
007 ADVANCED ORCHESTRATION (3)

4202-6202. Seminar: Music Theory and Analysis. (3). Advanced course in theory, counterpoint, and

MUSIC

PROFESSOR RUSSELL O. PUGH,
Interim Chair
Room 123B, Music Building

APPLICATION AND AUDITION PROCEDURES: Special application and audition procedures are required. See the description of the music programs in *Colleges and Degree Programs*.

PIANO PROFICIENCY: All undergraduate music majors must take a piano placement evaluation prior to enrolling in applied music courses. This evaluation will place students in the appropriate piano class (MUSE 1105, 1106, 2107, 2108) to develop skills necessary to pass the Piano Proficiency Examination. All students in the Bachelor of Music (in Music) degree program must pass the Piano Proficiency Examination before the beginning of the senior year. This may be done in either of two ways: (1) by completing MUSE 2108, or (2) by passing, without credit, the Piano Proficiency Examination given once each semester. Piano proficiency requirements vary according to the area of concentration. A verification will be mailed to the student and appropriate officials upon completion of the examination. After successful completion of this examination, music students whose major instrument is not piano may audition for major group or private piano instruction.

COMMERCIAL MUSIC PIANO PROFICIENCY: In lieu of the above piano proficiency, all Bachelor of Music commercial music majors, with the exception of keyboard students and students with a concentration in Music Business or Recording Technology must pass the commercial music piano proficiency examination prior to their final semester in the program.

K307 MUSIC THEORY AND COMPOSITION (MUTC)

Placement in the Music Theory sequence for undergraduates will be determined through examination. NOTE: Courses in Composition and Electronic Music may be repeated for credit but not for the purpose of improving the grade originally earned.

1001. Basic Music Theory. (2). For students who plan to major in music but do not meet minimum standards for MUTC 1008. Not allowable as credit toward the satisfaction of requirements for the major or minor. Two laboratory hours per week.

1008. Music Theory I. (3). (1004). Basic notation, scales, intervals, triads, key signatures; analysis and exploration of technical material and written exercises in historical areas of plain chant through late 16th century. COREQUISTE: MUTC 1010. PREREQUISITE: Theory placement exam.

1009. Music Theory II. (3). (1005). Four part structures, all seventh chords, chorale harmonization figured bass realization; analysis and written exercises from historical area of early 17th century through J. S. Bach. COREQUISTE: MUTC 1011. PREREQUISITES: MUTC 1008, 1010.

analysis of literature. Contrapuntal and harmonic techniques. Research; theoretical problems from pedagogical point of view; writing in strict and free styles. Recommended as review course for graduate students. PREREQUISITE: permission of instructor.

4203. Critical Studies in Music. (3). Directed research in music theory, history and literature; study in depth related to major concentration area; required of theory majors; term paper.

4260-69-6260-69. Special Topics in Theory and Composition. (1-3). Topics are varied and announced in *Schedule of Classes*.

4501-6501. Composition. (2 or 4). Composition in varied forms for large and small ensembles and solo instruments; analysis of contemporary works and practical application of techniques. May be repeated for additional credit. PREREQUISITE: recommendation of upper division examining committee. NOTE: *Composition taught as applied music. Students receive equivalent of one hour lesson per week. Fee for this instruction is \$60.00 per semester.*

4502. Composition for Non-Composition Majors. (3). Class instruction in free composition for students not majoring in composition. Practical experience in idea generation, form, development, and instrumentation. PREREQUISITE: MUTC 3008. NOTE: *Composition taught as applied music. Students receive equivalent of one half-hour lesson per week. Fee for this instruction is \$30 per semester.*

4511. Intermediate Electronic Music. (2). Emphasis on basic techniques through work in tape manipulation, study of history and aesthetics of electronic music. The two hours credit earned from this course may be utilized as composition credit toward composition concentration. PREREQUISITE: for music majors only or with permission of instructor. FEE: \$60.00.

4512. Advanced Electronic Music. (2). Continuation of MUTC 4511. Emphasis on individual compositional projects. May be repeated for credit, but only two hours may be utilized as composition credit in composition concentration FEE: \$60.

4599. Senior Composition Recital. (1).

K304 MUSIC HISTORY, LITERATURE, AND APPRECIATION (MUHL)

1101. Music Appreciation. (3). Music of various Western and non-Western cultures and historical periods, including the creative process, the formal elements of music, and musical styles, genres, and media. Attendance at some concerts required. NOTE: May not be used to satisfy requirements for degrees in Music. [G].

3301. History of Music to 1700. (3). Development of significant musical styles; attention to individual contribution of major composers. PREREQUISITE: MUTC 2008 or permission of instructor.

3302. History of Music Since 1700. (3). Continuation of MUHL 3301. PREREQUISITE: MUTC 2008 or permission of instructor.

4001. Piano Repertory. (3). Survey of stringed keyboard repertoire from Bach and his contemporaries to the present. Representative works analyzed in regard to historical, stylistic, formal and aesthetic features. PREREQUISITE: junior standing in music or permission of instructor.

4002-6002. Song Repertory I. (3). Survey of Italian repertoire from 17th century to present. Comprehensive study of music and poetry of the German *lied*. The Cycle. Recital planning.

4003-6003. Song Repertory II. (3). Development of French *mélodie*. The Nationalist schools. English song literature from Baroque to present. American song with emphasis on 20th-century literature.

4005-6005. History and Literature of the Organ. (3). Literature for the organ and its effect on and interaction with organ design.

4251-6251. Collegium Musicum: Laboratory in Music History. (3). Use of lute, viols, recorders, other early musical instruments and voice in performance of early music; primary sources (facsimiles of early prints, MSS, and works on performance practice) will be used in preparation of performances. May be repeated for credit, but not for the purpose of improving grade originally given.

4260-69-6260-69. Special Topics in Music History. (1-3). Topics are varied and announced in *Schedule of Classes*.

4407-6407. The Opera and Music Drama. (3). Survey of opera before Richard Wagner; Wagner's music dramas and operas of his contemporaries; dramatic and musical significance of each phase of development of two forms. PREREQUISITE: MUHL 3301, 3302; or permission of instructor.

4408. Style Periods in Music History. (3). Music and historical data from various periods of Western musical history. May be repeated for credit when topic varies.

- 001 MEDIEVAL MUSIC
- 002 RENAISSANCE MUSIC
- 003 BAROQUE MUSIC
- 004 CLASSIC MUSIC
- 005 ROMANTIC MUSIC
- 006 20th CENTURY MUSIC

4500. String Repertory. (3). Histories, texts, methods, periodicals, orchestral studies, and solo and ensemble literature of the individual string instruments.

4601. Comparative Arts. (3). Cultural activities in their interrelation with each other and with corresponding historic and economic events. Open without prerequisite to non-music majors of junior and senior standing.

4800-6800. World Musical Styles. (3). Musical styles and role of music performance in preliterate and folk societies throughout world.

4801-6801. American Folk and Popular Music. (3). Folk and popular elements in American music. Role of mass media, especially phonograph record, in utilizing and changing folk music. Historical development and interrelationships of various musical styles ranging from 19th century minstrels to roots of rock and roll. Emphasis on southern Anglo-American and Afro-American folk and popular musical styles.

4802-6802. Studies in American Folk and Popular Music. (3). Characteristics and development of a particular form of American folk or popular music. Topics include the following:

- 002 BLUES
- 006 HISTORY OF ROCK AND ROLL MUSIC
- 007 HISTORY OF JAZZ
- 009 MEMPHIS MUSIC

4803. Individual Studies in Music History. (1-3). Directed individual study in selected areas of music history chosen in consultation with instructor. May be repeated for credit with permission of department chair. May not exceed 6 hours credit.

K316 SACRED MUSIC (MUSA)

4104-6104. Sacred Music in History and Practice I. (3). Survey of Jewish and Christian sacred music, exploring origins of styles, traditions, and current practices.

4105-6105. Sacred Music in History and Practice II. (3).

4106-6106. Children's Choirs in the Church. (3). Organization and development of a children's choir program in the church; rehearsal techniques; literature; vocal development; recruiting; contemporary approaches.

4260-69-6260-69. Special Topics in Sacred Music. (1-3). Topics are varied and announced in *Schedule of Classes*.

4801-6801. Individual Studies in Sacred Music. (1-3). Directed individual study in selected areas of music chosen in consultation with instructor. May be repeated for credit with permission of department chair. May not exceed 6 hours credit.

K318 APPLIED MUSIC (MUAP)

Applied music is offered at three levels: (1) major group instruction, (2) lower division, and (3) upper division. Lessons are given by members of the university faculty and by special instructors. Since the number of students who can be accepted is limited, it is advisable that the student audition as early as possible to be assured a place with the requested teacher. Practice facilities are provided without charge, but there are additional fees for the individual lessons and a deposit is required for practice room keys.

All music majors must enroll in an ensemble each semester. Non-music majors enrolled at Memphis State University as degree seeking students may enroll and be accepted for applied instruction where staff time is available. If accepted for applied instruction, non-music majors must simultaneously enroll and actively participate in a large ensemble sponsored by the Department of Music. For additional details, see LARGE

MUSICAL ORGANIZATIONS in this section of the Catalog.

Any student enrolled at Memphis State University may audition for applied jazz lessons as space permits. Any student accepted for applied jazz lessons must concurrently participate in an appropriate jazz ensemble or combo. Jazz ensemble assignments are made following the jazz auditions during registration week at the beginning of the semester.

All jazz and studio bass majors must simultaneously be enrolled in classical bass, MUAP 1541 until a level of proficiency equal to entrance into upper division is attained.

All jazz and studio guitar majors must take six semester hours of classical guitar which is the maximum allowable for credit towards the degree. If a student can meet the requirements in less time, and wishes to discontinue classical study, the student may do so with permission of the instructor and consultation with the jazz and studio faculty. In the event a student cannot meet the requirements after six semester hours of study, it is the student's responsibility to pursue classical guitar as an elective or until such time as requirements are met to the satisfaction of the guitar and jazz and studio faculty.

FEES: In addition to the regular student fees, all persons taking applied music will be assessed \$30.00 per semester for the half-hour lessons. Students registering for one (1) semester hour credit will receive one half-hour lesson per week. All others will receive one hour lesson per week regardless of credit hours.

REGISTRATION: Students will register for lessons in the same manner and at the same time as they register for other courses; however, a student may not be assigned to a course number until he has auditioned. Auditions are held in the Music Building during the pre-college counseling, advising and registration periods before each semester. Auditions may be scheduled in the Music Office, Room 123, Music Building. Any inquiries concerning credits or course numbers should be directed to the chair of the Department of Music.

CREDITS AND GRADES: A student may register for one or two hours credit per semester and will be assigned to individual lessons, a master class, or a combination of the two, commensurate with his level of performance. Additional credit may be earned at the lower division and upper division level. Students earning more than two credits per semester will be assigned additional practice and will be expected to perform at a higher level than those students registered for fewer credits. Grades are awarded on the same basis and have the same significance as in other subjects.

REPETITION OF COURSES: MUAP courses in individual lessons and major group instruction, small ensembles, and large ensembles may be repeated for credit but not for the purpose of improving the grade originally earned.

EXAMINATIONS: For an examination in applied music, each student will prepare and perform for members of the faculty of the Department of Music suitable musical selections and technical exercises of a grade of difficulty appropriate to his standing. Examinations are held in designated rooms on days set aside for this purpose near the end of each semester. Credit for the course will not be awarded to any student who fails to take the examination.

1000. Applied Music Workshop. (.5). This course is required of all music majors for eight semesters. (S/U only).

3999. Junior Recital. (1).

4260-69-6260-69. Special Topics in Applied Music. (1-3). Topics are varied and announced in *Schedule of Classes*.

4799. Conducting Recital. (1).

4801. Individual Studies in Applied Music. (1-3). Directed individual instruction in applied area not listed under MUAP. May be repeated, not to exceed 6 semester hours credit. PREREQUISITE: permission of department chair.

4999. Senior Recital. (1).

MAJOR GROUP INSTRUCTION: Any student of the university may audition for lessons at the major group level except in organ; organ students must have the ability to play the piano before beginning organ instruction. A student may not receive more than four hours credit in any one area of major group instruction. The fee for major group instruction will be the same as for one half-hour lesson per week: \$30.00 per semester.

APPLIED MUSIC COURSES

Instrument	Major Group instruction (2)	Lower Division (1-4 each)	Upper Division (1-6 each)
Trumpet	1110	1111	4111-6111
Horn	1120	1121	4121-6121
Trombone	1130	1131	4131-6131
Tuba	1140	1141	4141-6141
Piano	1310	1311	4311-6311
Harpsichord	—	1321	4321-6321
Organ	—	1331	4331-6331
Percussion	1410	1411	4411-6411
Violin	1510	1511	4511-6511
Baroque Violin	—	1512	4512-6512
Viola	1520	1521	4521-6521
Cello	1530	1531	4531-6531
Bass	1540	1541	4541-6541
Guitar	1550	1551	4551-6551
Harp	1560	1561	4561-6561
Viola da Gamba	1570	1571	4571-6571
Voice	1610	1611	4611-6611
Flute	1710	1711	4711-6711
Oboe	1720	1721	4721-6721
Clarinet	1730	1731	4731-6731
Saxophone	1740	1741	4751-6751
Bassoon	1750	1751	4761-6761
Recorder	1760	1761	4761-6761
Jazz Trumpet	—	1112	4112
Jazz Piano	—	1312	4312
Jazz Percussion	—	1412	4412
Jazz Bass	—	1542	4542
Jazz Guitar	—	1552	4552
Jazz Voice	—	1612	4612

LOWER DIVISION COURSES: Applied music courses in the lower division include the study normally carried out during the freshman and sophomore years. Piano or instrumental students at this level should have had several years of intensive study prior to university entrance so that they have a secure, reliable, and well-grounded technique on the instrument. Organ students may begin at this level provided that they play the piano well and have reasonable ability in sight-reading. Those who do not meet this requirement will register for MUAP 1310. To be admitted to lower division study a student must first pass a qualifying examination.

Students who fall short of the requirements for admission to the lower-division courses will be advised to register for major group instruction until deficiencies are eliminated. Course numbers will be repeated for each semester of study.

UPPER DIVISION COURSES: Promotion to the upper division does not follow automatically after the completion of four semesters of courses in the lower division but is made only on the recommendation of the upper division examining committee; such a recommendation will be made only if the student's proficiency as a performer bears promise of future artistic and professional qualities as a soloist. It is at this level that the student normally begins preparation for a recital.

JUNIOR AND SENIOR RECITALS: Most degree plans include a junior and/or a senior recital. To register for recital credit, a student must be enrolled in upper division applied music. All required recitals must be approved by the faculty. This is normally accomplished no later than two weeks prior to the scheduled date at which time the entire program is performed for a faculty committee. Only upon successful completion of this hearing may a student confirm the scheduled date and make arrangements for the printing of the program.

PREREQUISITE: Participation in jury examination for woodwinds, brasses, and strings. Student should register for the semester he intends to complete requirement.

SMALL ENSEMBLES AND CHAMBER MUSIC: Advanced students are encouraged (and for certain degree plans are required) to participate in the following groups. Selection for membership is based on audition; courses may be repeated with the approval of the student's advisor. Three one-hour meetings per week.

3101. Brass Ensemble. (1). Practical applications of brass performance techniques for a small chamber ensemble, one performer to a part; survey of brass chamber music. **PREREQUISITE:** permission of instructor.

3103. Jazz Combo. (1). Practical application of basic jazz improvisatory skills; combo experiences in all jazz styles: traditional, bop, contemporary. Audition required.

3301. Chamber Music for Pianists. (1). Applied work in piano ensembles, chamber music, and accompanying for woodwinds, brasses, strings, and vocalists.

3401. Percussion Ensemble. (1). Study and performance of selected traditional, contemporary, avant-garde and pops percussion literature. Open to students in percussion concentration and others through audition.

3402. Contemporary Chamber Players. (1). Ensemble of mixed and variable instrumentation. Performance of repertoire written since 1900 and little known works of other periods. Primary goal of ensemble: to provide experiences in solving unique performance problems of contemporary music. **PREREQUISITE:** permission of instructor.

3403. Orff Ensemble. (1). Study and performance of literature written for Orff instruments, including barred percussion, unpitched percussion, and recorder.

3501. String Ensemble. (1). Study and performance of string chamber music repertoire. Coaching sessions weekly with a member of music faculty. Open to music majors and non-majors through audition.

3601. Camerata Singers. (1). Small Choral Ensemble. Chamber repertoire from Renaissance to present. Open to music majors and non-music majors through audition.

3602. Opera Workshop. (1-6).

3603. Opera Soloists. (1). Preparation and performance of role in major production of University Opera Theater. Audition required.

3604. Opera Production Laboratory. (1-6).

3701. Woodwind Ensemble. (1). Study and performance of original and transcribed works for varied combinations of woodwind instruments. Audition required.

LARGE MUSICAL ORGANIZATIONS

A minimum of eight semesters of large ensemble is required of music majors. (Exceptions to this policy are pianists concentrating in Performance and guitarists who are required to have a minimum of 6 semesters of large ensemble; Commercial Music majors in Performance who are required to have 8 semesters of the appropriate level jazz ensemble; and Commercial Music majors in Composition/ Arranging who are required to have 4 semesters of the appropriate level jazz ensemble. Commercial Music majors concentrating in Music Business or Recording Technology are exempt from this requirement.) Generally, wind and percussion performers are to participate in an instrumental ensemble; string performers are to participate in orchestra; and vocal, keyboard, and guitar performers are to participate in a choral organization unless assigned to a large instrumental ensemble. Transfer students lacking sufficient large ensemble credits may partially fulfill their large ensemble requirement by simultaneously enrolling in a small ensemble with a maximum of 2 credit hours of small ensemble applicable to the total large ensemble requirement. Ensemble assignments are based on audition and may be repeated. Any exception to this general ensemble assignment policy may be made after a review of petitions by the department chair, the appropriate ensemble director, and the applied studio teacher.

2001. University Concert Band. (1). (2001001). Performance of traditional and contemporary wind compositions. Participants chosen from this ensemble for basketball pep-bands. Open to music majors and non-music majors.

2002. Marching Band. (2). Selected ensemble which performs at all home football games and occasional out-of-town games in each season. Rehearsal approximately ten hours weekly. Open to music majors and non-music majors. [G].

2003. Varsity Band. (1). (2001002). Concert performance of traditional and contemporary wind compositions. Participants are chosen from this ensemble for basketball pep-bands and usually have participated in Fall marching band. Open to music majors and non-music majors.

2004. University Gospel Choir. (1). Ensemble open to all students. Music includes contemporary gospel spirituals, and gospel hymns. Serves as outlet for students interested in developing musical and personal capacities. Open to music majors as elective. Two class meetings per week.

3004. University Wind Ensemble. (1). Selected ensemble of instrumentalists. Study and performance of outstanding repertoire for wind ensembles. Open to music majors and non-music majors through audition.

3005. University Orchestra. (1). Study and performance of major orchestral literature. Additional opportunities for opera, chamber-orchestral and chamber ensemble performance. Audition required.

3006. University Singers. (1). Study and performance of choral works from broad spectrum of choral literature, sacred, secular, accompanied and a cappella. Open to music majors and non-music majors through audition.

3007. Opera Chorus. (1). Choral ensemble for opera productions with exploration of related stage techniques. Extra rehearsals at discretion of conductor. Audition required.

001 OPERA CHORUS MSU

002 OPERA CHORUS OPERA MEMPHIS

3008. Oratorio Chorus. (1). Study and performance of major works primarily oratorio in nature. Open to music majors, non-music majors and the off-campus community. Audition required.

3010. University Jazz Ensemble. (1). (3102). Study and performance of varied jazz styles, including repertory from standard big band literature as well as studio ensembles. Participation in a jazz reading section may be required. Open to music majors and non-majors through audition. This course will meet large ensemble requirements for Commercial Music majors only.

001 INSTRUMENTAL

002 VOCAL

3011. Recording Studio Lab Ensemble. (3). To perform and record works written by students in Commercial Music program. This course will meet large ensemble requirements for Commercial Music majors only.

001 RECORDING ORCHESTRA FOR INSTRUMENTAL PERFORMANCE

002 RECORDING ENSEMBLE FOR STUDIO SINGERS

K313 MUSIC EDUCATION (MUSE)

FIELDS OF ENDORSEMENT FOR TEACHING: For students in the School Music Concentration of the Bachelor of Music in Music degree, endorsement may be obtained in Instrumental Music and in Vocal Music. Normally, a student can expect to be recommended in only one of these areas. Vocal Music applicants should be able to play piano accompaniments of moderate difficulty, should possess an adequate solo voice for school music purposes, and should schedule a variety of large choral ensembles. Instrumental Music applicants should study one instrument of major emphasis and participate in large instrumental ensembles. Students in either area may satisfactorily meet piano and voice requirements with completion of MUSE 2108 and MUSE 1113 and their prerequisites. A graduation recital is required in both areas.

1100. Class Piano for Non-Music Majors. (2). Beginning instruction in piano for non-music majors. Development of basic reading and performance skills.

1101. Class Instruction in Brass Instruments. (2). Basic performance skills and teaching techniques on trumpet, trombone, French horn, baritone horn and tuba for those who intend to teach instrumental music in schools.

1103. Class Instruction in Percussion Methods. (2). Basic performance skills and teaching techniques on snare drum, timpani, and keyboard percussion instruments for those who intend to teach instrumental music in schools.

1104. Class Instruction in Woodwind Instruments. (2). Basic performance skills and teaching techniques on clarinet, flute, saxophone, oboe, and bassoon for those who intend to teach instrumental music in schools.

1105. Class Instruction in Piano. (2). Basic technique, with emphasis on sight-reading. PREREQUISITE: MUTC 1001 or permission of instructor.

1106. Class Instruction in Piano. (2). Playing of songs used in school music teaching; community songs, and hymns. PREREQUISITES: MUSE 1105; MUTC 1008, 1010.

1111. Class Instruction in Guitar. (2). Functional accompanying skills as commonly used in folk and popular music. Basic and intermediate performance technique appropriate to the student's ability. May be repeated once for additional credit.

1112. Class Instruction in Voice. (1). Fundamentals of vocal production useful for all music teachers.

1113. Class Instruction in Voice. (1). Continuation of 1112 with more emphasis on solo singing of easy songs.

1115. Classroom Instruments: Guitar and Recorder. (2). Development of basic performance and teaching skills in guitar and recorder. Analysis of teaching materials and repertory applicable for elementary and secondary education. Integration of guitar and recorder into classroom music and choral music ensembles. PREREQUISITE: MUTC 1009. Open

only to music majors or by special permission of instructor.

1116. Class Instruction in Stringed Instruments. (2). Basic performance skills on violin, viola, cello, or double bass. Emphasis on principles of sound production, intonation, and bow strokes. Various published methods examined and compared. Orchestral and chamber music literature for string players.

2107. Class Instruction in Piano. (2). (1107). Simpler Bach chorales, more difficult songs, and accompaniments, appropriate to the student's major field; memorization optional. PREREQUISITES: MUSE 1106; MUTC 1009, 1011.

2108. Independent Studies In Piano Proficiency. (2). Piano repertoire and technique, accompaniments, harmonization, transposition, and sightreading to satisfy the core requirements of the piano proficiency exam. Requirements vary according to the student's concentration area and the degree emphasis. PREREQUISITES: MUSE 2107; MUTC 1009, 1011.

3001. Music for Children. (3). Required of all elementary education majors. Goals, materials, and methods of music appropriate for the elementary school child; music reading and playing of classroom instruments; creative movement; activities for music appreciation.

3700. Basic Conducting. (2). Development of conducting skills. Basic baton principles, rhythmic analysis, expressive techniques, phrasing, and multi-metered problems. Class meetings require performing as instrumentalist or vocalist as well as conductor. *Three class hours per week.* PREREQUISITE: Completion of MUTC 3008.

3702. Score Reading. (3). Realization of open score at the keyboard; vocal scores, small orchestra and large orchestra scores; clefs, transpositions, etc.; employing literature from various periods of music history.

4001-6001. Orff-Schulwerk for Classroom Teachers I. (3). Broad, practical introduction to use of Orff-Schulwerk approach to elementary music teaching. Development of performance leadership skills emphasized. Not open to music majors.

4002-6002. Orff-Schulwerk for Classroom Teachers II. (3). Emphasis on teaching process, children's folk materials, rhythmic and melodic training, development of lesson plans, and Orff instruments. PREREQUISITE: MUSE 4001.

4201-6201. Individual Studies in the Teaching of Music. (1-3). Individual study of problems and opportunities faced by person who teaches music in schools; for classroom teachers, music teachers, supervisors, principals, and administrators. May be repeated, but not for the purpose of changing a previous grade, for maximum of 6 semester hours credit.

4202. Materials and Methods of Music, Grades K-6. (3). Aims and principles of music and of traditional and contemporary methods of teaching in elementary schools. Creative approach to rhythm, listening, instrumental and singing activities. Contemporary systems of music teaching for elementary grades surveyed.

4203. Materials and Methods of Classroom Music. (3). (Same as SCED 3322). Philosophy, methods, and materials for teaching non-performance music classes in secondary school, grades 7-12. Includes demonstration, observations, and simulation of classroom teaching at this level.

4204. Instrumental Music in Elementary and Secondary Education. (2). Designed to prepare the school instrumental teacher to teach basic music concepts to beginners in mixed instrumental group settings. Instruction methodologies and materials, simple instructional arranging, instrument assignment, and instrument maintenance stressed. Lab experience. PREREQUISITE: junior standing in music.

4205-6205. Marching Band Techniques. (2). Organizing and conducting the marching band; gridiron charting and marching procedures with a study of precision drill, formations and pageantry. PREREQUISITE: permission of the instructor.

4206-6206. Music for Exceptional Children. (3). Types of exceptional children and implications for providing realistic musical activities in the classroom. Emphasis on use of music as a tool in reaching non-musical goals such as language development, social adjustments, motor coordination, aural and visual perception (team taught with Special Education).

4207. Choral Methods and Materials. (2). Selected materials and methods of practical concern to the vocal-choral music specialist. Consideration of music series, scheduling techniques, voice class development, choral publishers, units of study. PREREQUISITE: junior standing in music.

4208-6208. Band Literature. (3). History and evolution of wind instruments and wind instrument playing and the history and development of the wind band and its literature, with general background material on the specific composers involved.

4209. Piano Tuning and Repair. (2). Concentrated study of basic techniques involved in piano tuning and adjustment. Some basic tools required.

4211. Vocal Diction. (2). Performance of art songs and arias in standard languages. Performance as a singer of international phonetic alphabet, French, German, and Italian.

4260-69-6260-69. Special Topics in Music Education. (1-3). Topics are varied and announced in *Schedule of Classes.*

4501. Basic Piano Pedagogy. (3). Emphasis on elementary piano methods including Pace, Suzuki, and class techniques. PREREQUISITE: permission of instructor.

4503. Advanced Piano Pedagogy. (3). Approaches to the teaching of piano technique, repertory, and musicianship. For upper division keyboard students. PREREQUISITE: upper division level in keyboard.

4505-6505. Principles of Accompanying. (3). Performance class involving practical study of instrumental and vocal standard repertory and the problems of ensemble playing. Facility in sight-reading and ability to assimilate music rapidly. Score-reading, transposition, and figured bass realization introduced as skills necessary to well rounded musicianship. PREREQUISITE: permission of instructor.

4506-6506. Introduction to Suzuki Talent Education for Strings. (3). Required of students who plan to serve as apprentice string teachers in MSU Suzuki Talent Education program. Basic instruction in Suzuki philosophy; participation with parents and children in Suzuki string classes.

4508-6508. Principles of Suzuki Piano. (3). Suzuki philosophy applied to development of the child's abilities and role of teacher and parent. Students will analyze technical and musical instruction of beginning piano student. PREREQUISITE: upper division piano skills.

4509-6509. Suzuki Violin Literature and Techniques. (3). Literature and technique taught in Suzuki Violin School; fundamental technique, development of posture, tone and listening ability in beginning students; analysis of pedagogical material. Required of students who plan to serve as apprentice teachers in MSU Suzuki String Program. PREREQUISITE: MUSE 4506.

4510-6510. Advanced Suzuki String Pedagogy. (3). Literature and technique taught in Suzuki Violin School; emphasis on development of advanced student; laboratory experience in MSU Suzuki String Program. Required of students planning to be apprentice teachers in MSU Suzuki String Program. PREREQUISITE: MUSE 4509.

4511-6511. Class Piano Pedagogy. (3). Group instruction techniques in teaching of beginning, intermediate, and early advanced piano. Emphasizes observation and practical application. For the piano major and/or prospective piano teacher. PREREQUISITE: upper division level in keyboard or permission of instructor.

4512-6512. Jazz Pedagogy for Music Educators. (3). Design and implementation of a comprehensive jazz curriculum, either at secondary or college level; teaching methodology in all disciplines of the jazz idiom. PREREQUISITES: advanced standing, permission of instructor.

4700. Instrumental Conducting. (2). (3701). Various problems encountered in preparation and conducting of instrumental scores; individual practice with opportunity for each student to conduct instrumental groups. *Three class hours per week.* PREREQUISITE: MUSE 3700.

4701. Choral Conducting. (2). Various problems encountered in preparing and conducting traditional and contemporary vocal scores; rehearsal techniques; individual practice with laboratory groups. *Three class hours per week.* PREREQUISITE: MUSE 3700.

4801-6801. Teaching Music Comprehensively. (3). Methods course to bring music theory, history, literature, performance, composition, and analysis to bear on teaching of music at any level — elementary, junior high, high school, college, and private studio.

4802-6802. Level I Orff-Schulwerk. (1-3). Basic Orff-Schulwerk techniques including body movement, soprano recorder, percussion, vocal performance, improvisation and arranging. PREREQUISITE: junior standing in music education or equivalent experience.

4811-6611. Orff-Schulwerk for Music Specialists. (3). Experience in Orff-Schulwerk through singing, rhythmic training, movement, improvisation, and instruments. Open to music majors and specialists only.

K320 COMMERCIAL MUSIC (CMUS)

1116. Class Instruction in Piano: Jazz/Pop/Commercial. (2). Basic harmonic patterns, chord symbol realization, voicing, basic rhythmic patterns. PREREQUISITE: MUSE 1105 or equivalency exam.

2101. Music Theory: Jazz/Pop/Commercial I. (3). (MUTC 2101). Basic harmonic structures, chord symbol realization, melodic structures, notation, articulation, rhythmic patterns; analysis of written and recorded jazz, pop, and commercial music; transcription of recorded materials. *Three lecture, one lab hours per week.* PREREQUISITE: MUTC 1009.

2102. Music Theory: Jazz/Pop/Commercial II. (3). Altered scales and modes, altered and extended chords, chromatic progressions, mediant relationships, poly-harmony and panchromaticism. *Three lecture, one lab hours per week.* PREREQUISITE: CMUS 2101.

2501. Composition/Arranging: Jazz/Commercial I. (2). Emphasis on small instrumental and vocal works, basic style and form. May be repeated for a maximum of 6 hours credit. PREREQUISITE: MUTC 2501 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is \$30.00 per semester.*

2502. Composition/Arranging: Jazz/Commercial II. (2). Emphasis on stage and jazz band arranging techniques. Introduction to line writing. May be repeated for a maximum of 6 hours credit. PREREQUISITE: CMUS 2501 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one half-hour lesson per week. Fee for this instruction is \$30.00 per semester.*

3100. Promotion and Management of Artists. (3). Problems involved in management and promotion of recording artists. Attention to management, recording procedures, booking, and personal appearance contracts; concert promotions and personal appearances as they relate to development of artist. A portfolio will be completed.

3101. Record Promotion and Sales. (3). Current practices in promotion and sale of recordings. Emphasis on radio station music formats and other methods of exposing recordings to the public. Sales portion examines wholesale, one-stops, rack, and retail store sale of recordings.

3102. Anatomy of Popular Song. (3). Analysis of current popular music; techniques of text setting; choice of text and musical styles; development of hook lines. PREREQUISITE: CMUS 2101 or permission of instructor.

3103. Trends in Contemporary Music Styles and Production. (3). Various styles of current popular musical groups and artists and their influences from earlier eras; discussion of prominent "behind-the-scenes" personalities—songwriters, producers, and engineers; analysis of musical styles and devices for purposes of developing ability to recognize and create songs with commercial potential.

3501. Composition/Arranging: Jazz/Commercial III. (2). Individual instruction for mixed ensembles and studio groups in various jazz and studio styles, standard and extended forms. May be repeated for additional credit. PREREQUISITE: CMUS 2502 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this instruction is \$60.00 per semester.*

3800. Recording Studio Procedures. (4). Fundamental concepts of audio recording; development of an understanding of studio equipment and techniques, and the application of musical values in commercial production. PREREQUISITE: permission of instructor.

3801. Studio Synthesizers. (2). Study of each module of synthesizer system; interfacing of modules and use of instrument for signal processing and composition; correlation of audible presentation of a tone with visible wave-shape display. PREREQUISITES: TECH 1811, CMUS 3800.

3802. Audio Recording for Non-Technology Majors. (4). Promote basic understanding of equipment, techniques, musical production values and technology commonly used in modern audio production. Synthesizers, MIDI, home studios, and computer-assisted composition and performance systems also examined. PREREQUISITES: junior standing and permission of instructor. Will not satisfy degree requirements for recording technology majors.

3825. Materials and Techniques of Improvisation I. (3). Development of improvisation skills on solo instruments or voice; basic chord patterns, scales, arpeggios; performance with rhythm section. PREREQUISITE: CMUS 2101 or permission of instructor.

3826. Materials and Techniques of Improvisation II. (3). Analysis of melodic structures; motivic fragmentation and sequencing; extended harmonic structures, articulatory variation; performance in small combo settings. PREREQUISITE: CMUS 3825 or permission of instructor.

3827. Materials and Techniques of Improvisation III. (3). Analysis and performance of music in standard styles, including bebop, Latin, third stream, soft rock, hard rock, and commercial; performance with combos and large jazz ensembles. PREREQUISITE: CMUS 3826 or permission of instructor.

3828. Aesthetics and Analysis of Jazz and Commercial Music Styles. (2). Fundamentals of form and style analysis; study of the artistic and commercial intentions and appropriateness of music from early popular styles to the present. PREREQUISITE: CMUS 2102 or permission of instructor.

4102-6102. Composer's Workshop: Jazz/Commercial. (3). (MUTC 4102). Composition in musical styles for various sizes of instrumental and vocal groups; writing for commercials, arranging; recording studio techniques. PREREQUISITE: CMUS 2502.

4103-6103. Jazz and Studio Ensemble Techniques. (3). (MUTC 4103). Jazz and studio performance styles, emphasizing arranging, ensemble technique, articulation, phrasing, recording studio techniques, and conducting.

001 INSTRUMENTAL PERFORMANCE 002 VOCAL PERFORMANCE

4201. Studies in Commercial Music. (1-3). Class or individual study of special problems in Commercial Music. May be repeated if course content differs.

4260-69-6260-69. Special Topics in Commercial Music. (1-3). Topics are varied and announced in Schedule of Classes.

4501. Composition/Arranging: Jazz/Commercial IV. (3). Individual instruction with emphasis on advanced line writing, fusion and contemporary mainstream styles, writing for full studio orchestra. May be repeated for additional credit. PREREQUISITE: CMUS 3501 or permission of instructor. NOTE: *Composition is taught as applied music. Students receive the equivalent of one hour lesson per week. Fee for this instruction is \$60.00 per semester.*

4502-6502. Introduction to Film Scoring and Editing. (3). Basic problems of writing music for film; commercials, shorts, and full length productions; selection of appropriate styles; introduction to editing room equipment; assignments for 16mm and 35mm film; writing from a cue sheet. PREREQUISITE: CMUS 2502 or permission of instructor.

4504. Entertainment Complex Administration. (3). Fundamentals for managers of concert halls, theme parks, stadiums, nightclubs, and other venue. Topics include: talent selection and negotiation, union considerations, publicity, security, cash management and complex budgets, selection of program material and presentation.

4602-6602. Introduction to Commercial Music. (3). (MUHL 4602) Music industry including copyright, royalties, producing, labor relations, promotion, advertising, and distribution. PREREQUISITE: permission of instructor.

4603-6603. Legal and Business Practices in the Recording Industry. (3). (MUHL 4603). Study of commercial music with lecturers and distinguished guests from the industry. Individual projects required.

PREREQUISITE: CMUS 4602 and permission of instructor.

4800. Basic Recording. (4). Audio engineering on modern multi-channel recording equipment using commercial production techniques. Emphasis on basic skills of microphone selection and placement, console operation, editing, mixing, and the engineer's artistic involvement in the project. PREREQUISITES: TECH 1811; CMUS 3800, and permission of instructor.

4801. Problems in Commercial Music. (1-3). Independent study. Music. May be repeated to maximum of nine hours, but not for purpose of changing grade originally given. PREREQUISITE: permission of instructor.

4802. Advanced Recording. (4). Advanced production laboratory in producing contemporary commercial recordings. Emphasis on signal processing, automation, advanced recording, editing, and mixing techniques. Student will apply knowledge of the creative, business, and technical aspects of the recording process to studio production assignments. PREREQUISITES: CMUS 4800 and permission of instructor.

4803. Advanced Studio Production and Technologies. (4). Comprehensive examination and application of emerging technologies in audio recording including audio/video production, digital recording, computer-assisted composition, and consumer equipment. PREREQUISITES: COMM 3824, CMUS 4802, and permission of instructor.

4804. Recording Studio Administration. (3). Financial and managerial aspects of operating a recording studio; scheduling, expansion, rate schedules and billing, hiring, securing venture capital, risk management, and providing related services. PREREQUISITE: Permission of instructor.

4805. Disc Mastering. (3). Principles, mechanics and techniques of tape-to-disc transfer. PREREQUISITES: CMUS 4800 and permission of instructor.

4897. Project in Commercial Music. (3-4). Final project in commercial music performance and composition: detailed proposal developed by student and main advisor.

001 PERFORMANCE PROJECT. (3). Project must include live and recorded performances demonstrating the student's mastery of various styles of jazz, popular, and commercial music performance.

002 COMPOSITION PROJECT. (4). Project must include music composed by the student in various styles of jazz, popular, and commercial music; live performance; music for part of an album; film score with film.

4898. Senior Project in Music Business or Recording/Engineering. (4). Comprehensive final project which demonstrates mastery of creative, technical, or business elements of commercial music industry. PREREQUISITES: senior standing and permission of instructor.

4899. Internship. (4). One semester of field work experience in selected areas of the music industry. PREREQUISITE: placement interview and permission of instructor.

THEATRE AND COMMUNICATION ARTS

PROFESSOR JOHN P. BAKKE, Chair
Room 143, Theatre and Communication Arts Building

The Department of Theatre and Communication Arts offers a B.A. degree with concentrations in Broadcasting, Communication, Film Studies, Film and Videotape Production, and Theatre, and a B.F.A. degree in Theatre with concentrations in Performance, Design and Technical Production, and Dance.

NOTE: Students may repeat THEA 3541, 3542, 4441, 4457, 4550, 4560; and DANC 3829 as often as advisor will allow; repetition will not result in a change of any grade previously given.

In addition to specific prerequisites, junior standing or permission of the department chair is a prerequisite for all 3000 and 4000-level courses in the Department of Theatre and Communication Arts.

K491 THEATRE (THEA)

Associate Professor John J. McFadden, Jr., Director

1411. Basic Oral Interpretation. (3). Introduction to interpretation of literature in performance. To develop and heighten performer's responsiveness to his literary text.

1551. Introduction to Theatre. (3). Experiential, conceptual, historical, and cultural study of theatre as a unique form of artistic expression and mirror of human experiences and values throughout the world. Survey of constituent elements of a theatrical work and its major forms of expression. *Attendance at Memphis State Theatre productions required [G].*

1561. Introduction to Design. (3). Historical and conceptual survey of basic elements of production — scenery, costumes, lighting, sound — and their relation to theatrical production process.

2501. Stage Movement. (3). Introduction to movement as basic element of actor's craft. Focus on recognition, development, and understanding of natural physical actions and rhythms and their application to stage. *[G].*

2511. Theatre Crafts. (3). Lecture/laboratory covering all phases of craft skills and equipment involved in technical theatre production. *Required lab work.*

2512. Introduction to Theatre Graphics. (3). Introduction to artistic graphic communication processes of technical theatre. Includes methodology and importance of beginning sketching; drafting; costume, set, and light design; as well as poster and program graphics. *Offered alternate years.*

2515. Stage Make-up. (3). Lecture/laboratory class in which fundamentals of theatrical make-up are studied through a series of make-up projects including corrective make-up, fantasy, mask and beard make-ups. *Offered alternate years.*

2530. Acting for Non-Majors. (3). Introduction to craft of acting. Development of actor's individual potential through basic technique. Performance of short scenes in class.

2531. Basic Acting Techniques. (3). First essential of acting study: exploration of the actor. Class exercises to develop relaxation, concentration, imagination, and improvisation skills.

2532. Character Development. (3). Principles of role analysis through study of subtext, character motivation, and objectives. *PREREQUISITE: THEA 2531 or permission of instructor.*

3212. Voice Production for the Performer. (4). Techniques for freeing the vocal mechanism: breathing, phonation, movement to enhance the performer's craft.

3213. Voice and Articulation for the Performer. (3). International Phonetic Alphabet. Standard American Dialect. Exercises in articulation and dialects as techniques for conveying dramatic intention and character.

3411. Language in Performance. (3). Language of literary text; creative exercises to develop and heighten performer's sensitivity to language context, structure, and rhythm in poetry. *Offered alternate years. [W].*

3412. Directing Experiments. (3). Theatrical image; creative exercises in imaginative use of space, time, and materials as they relate to stage direction and design. *Offered alternate years.*

3505. Mime. (3). Techniques, composition and exploration of various styles of mime. *PREREQUISITE: THEA 2501 or permission of instructor.*

3506. Movement Styles. (3). Techniques and choreography of the movement styles of various periods, with study in such areas as stage combat and masks. *PREREQUISITE: THEA 3505 or permission of instructor.*

3511. Stagecraft. (3). Lecture/laboratory includes theatre terminology, theatre forms, production organization, job descriptions, and safety. Scenery construction to include painting, flat scenery, three-dimensional scenery, and introduction to steel materials. *Required lab work. Offered alternate years. PREREQUISITE: THEA 2511.*

3531. Scene Study. (3). Development of ensemble work within scenes. May be repeated for a maximum of 6 hours with permission of instructor. *PREREQUISITE: THEA 2532.*

3532. Advanced Scene Study. (3). Continuation of 3531. Attention to material from modern classics. May be repeated for a maximum of 6 hours with permission of instructor. *PREREQUISITE: THEA 3531.*



3541. Performance Laboratory. (1-3). (3401). Practical application laboratory for performance courses and special workshops. (Repeatable for credit).

001. ACTING TECHNIQUES. (1). To be taken in conjunction with 2531/2532 — Section 1 only.

002. ACTING TECHNIQUES. (1). To be taken in conjunction with 2531/2532 — Section 2 only.

003. SCENE STUDY. (1). To be taken with 3531/3532 only.

004. STYLES. (1). To be taken with 4531/4532 or 6531/6532 only.

005. AUDITION PREPARATION. (1). Weekly meeting to review/critique actors' audition choices and progress.

006. VOICE TECHNIQUES. (1). For students seeking critical review and help with preparation and delivery of musical pieces.

007. STAGE MANAGEMENT. (1). Lecture and training sessions precede actual assignment to departmental productions. Stage managers work closely with directors and oversee entire backstage operation during production run.

010. TV/FILM. (1). To be taken with 4631-6631 only.

3542. Production Laboratory. (1-3). (3501). Preparation for and participation in departmental theatre productions. Individualized work is in form of supervised laboratory situations. Running crews for season productions selected from participating sections. May be repeated for credit.

001. MANAGEMENT AND PUBLICITY. (1).
002. COSTUMES. (1).
003. LIGHTS. (1).
004. SOUND. (1).
005. SCENERY. (1).
006. PROPS. (1).
007. MAKE-UP. (1).

3561. Principles of Scene Design. (3). Application of principles to various theatrical conventions and configurations. *Offered alternate years.*

3562. Principles of Costume Design. (3). Techniques of costume design with special attention to character interpretation and design visualization. Open to non-majors with permission of instructor. *Offered alternate years.*

4210-19-6210-19. Special Topics In Theatre. (1-3). Topics are varied and announced in *Schedule of*

Classes. May be repeated to a maximum of 9 hours when topic varies.

4401-6401. Interpretation of Children's Literature. (3). Adaptation of literature for individual and group performances in children's theatre and in instruction for elementary and secondary schools. Includes styles of literature, principles of performance, and techniques for performance adaptation. May be repeated for up to 6 hours credit with permission of instructor. *Offered alternate years.*

4441-6441. Performance Repertory. (3). Group performance in dramatic and narrative theatre styles as well as dance and theatre movement. May be repeated for a maximum of 9 hours. **PREREQUISITE:** Prospective students must audition for and be cast in the Memphis Moving Line Company.

4455. Directing Narrative Theatre. (3). Directing techniques for staging literary texts not originally written for the theatre. Includes script adaptation of short stories, poetry, and non-fiction prose. Directing projects required. *Offered alternate years.* **PREREQUISITE:** THEA 4521 or permission of instructor.

4457-6457. Interpretive Styles. (3). Exploration of performance style as it evolves from language, structure, and style of the literary text. Materials for performance will vary each semester and may alternate among the genres of prose fiction, poetry, and period drama. Repeatable for a maximum of 9 hours when topic varies. *Offered alternate years.* **PREREQUISITE:** permission of instructor.

4501-6501. Advanced Movement Styles. (3). Further development of technique, and refinement of personal as well as period styles. *Offered alternate years.* **PREREQUISITE:** THEA 3506.

4502-6502. Ensemble Movement. (3). Performance troupe blends improvisational techniques, voice, mime, acting, and physical movement. *Offered alternate years.* **PREREQUISITE:** permission of instructor.

4503-6503. Creative Dramatics. (3). Basic techniques and theories for use of dramatization in elementary and secondary education. Includes socio-drama, dramatization of school subjects and daily concerns, and improvisation and creation of dramatic plays.

4515-6515. Scene Painting. (3). Lecture/laboratory covering techniques of painting scenery for stage. *Offered alternate years.* **PREREQUISITE:** THEA 3561.

4516-6516. Technical Direction. (3). Lecture/laboratory for theatre technicians includes production organization and safety, engineering, rigging, materials control and supply ordering. *Offered alternate years.* **PREREQUISITE:** THEA 3511.

4521. Principles of Stage Direction. (3). Exploration of conceptual, planning and implementation skills of stage director from script interpretation to rehearsal and performance. Attention to both traditional and non-traditional theatrical modes. Directing projects required. *Offered alternate years.* **PREREQUISITE:** THEA 3412 or permission of instructor.

4523-6523. Children's Theatre. (3). Exploration of theories and styles of children's theatre, application of principles to problems in production and preparation of plays designed for children's audiences. May be repeated for up to 6 hours credit with permission of instructor. *Offered alternate years.*

4531-6531. Acting Styles. (3). Development of acting styles as influenced by environments of historical periods. (May be repeated for maximum of 6 hours.) *Offered alternate years.* **PREREQUISITE:** THEA 3532.

4532-6532. Advanced Acting Styles. (3). Continued work in acting styles. (May be repeated for maximum of 6 hours.) *Offered alternate years.* **PREREQUISITE:** THEA 4531.

4541. Internship. (1-6). (4011). Supervised work in actual university, community, or professional theatre productions on internship basis. Credit varies with amount of time and responsibility involved. May be repeated for a maximum of 12 semester hours. **PREREQUISITE:** permission of Director of Theatre.

4550-6550. Technical Production Studio. (3). Study and application of technologies, materials, and techniques of theatrical production. Semester topics will alternate among areas of theatre technology, lighting and sound, and costuming. Repeatable for a maximum of 9 hours when topic varies.

4551-6551. Theatre History — Classic. (3). Shaping forces and theatrical forms from primitive civilizations

to the Renaissance in both Western and non-Western cultures, with emphasis on the former. *Offered alternate years.*

4552-6552. Theatre History — Modern. (3). Continuation of 4551 to present. *Offered alternate years.*

4553. Directed Individual Studies in Theatre. (1-3). For advanced student who wishes to do concentrated study in specific area of theatre. May be repeated for maximum of nine hours. **PREREQUISITE:** permission of instructor.

4554-6554. Costume History. (3). Survey of clothing fashions from primitive times to present; special emphasis on psychological implications of fashion change applicable to theatre. May be repeated for a maximum of six hours. *Offered alternate years.*

4560. Design Studio. (3). Lecture/seminar/practicum investigation of the arts of theatrical design; conceptual development, creative design process, survey of forms and styles, practical design execution, and criticism. Semester topics will alternate among the design areas of scenery and properties, lighting and sound, and costuming. Repeatable for a maximum of 9 hours when topic varies.

4564. Scenography. (3). Total production design—coordination of all aspects of costume, scenery, and lighting into whole of production. (May be repeated for maximum of 6 hours.) *Offered alternate years.* **PREREQUISITE:** THEA 4560 or permission of instructor.

4571-6571. Playwriting. (3). Theory and principles of writing plays for stage. Practice in writing either short or long play. May be repeated for maximum of 9 semester hours. *Offered alternate years.* **PREREQUISITE:** permission of instructor. [W].

4582. Script Interpretation. (3). Exploration of the script as blueprint for realization of artistic stage image. Special attention given to plot, structure, character treatment, and language style as they relate to performance, direction, and scenography. *Offered alternate years.*

4591. Theatre Management. (3). Procedures and practices for stage management; theatrical production management; box office; publicity and promotion for theatre and performing arts. Comparative study of commercial, educational, and amateur theatre operations. *Offered alternate years.*

4592-6592. Theatre Architecture and Facilities Planning. (3). Processes and techniques employed by theatre planners in design and construction/renovation of theatrical spaces and structures. Includes survey of theatre forms, historical development of theatrical structures and spaces, programming methods and procedures, specification, renovation techniques, multi-use structure concepts, and consultation procedures and practices. *Offered alternate years.* **PREREQUISITE:** permission of instructor.

4595-6595. Theatre Sound. (3). Technical and theoretical principles, equipment, operational techniques, systems design, creative design processes, and aesthetics, for Theatre Sound. Application of traditional and contemporary techniques and equipment. Research, project work, and realized sound designs required. *Offered alternate years.*

4631-6631. Acting for Film and Television. (3). Educational experience for actor in media of film and television, concentrating on dramatic, commercial and documentary areas. *Offered alternate years.* **PREREQUISITE:** THEA 3532 (for acting majors) — OR — COMM 3823 or 3824 or permission of instructor.

4921-6921. Elements of Play Production. (3). Choosing the play, casting, directing, technical aspects of production as they relate to needs of people in educational and community settings.

K497 DANCE (DANC)

The following 1000 and 2000 level courses followed by a [G] may be used to fulfill the university degree requirements for physical activity courses. See *Graduation from the University for details.*

1151. Introduction to Dance. (3). Comprehensive study of dance as an expressive art form, a symbolic language, and an integral aspect of world cultures. Emphasis on developing both aesthetic response and critical skills through an analysis of major dance forms, styles, and genres. [G].

1821. Modern Dance I. (2). Introduction to modern dance techniques; emphasis on exploration of

fundamentals of dance. For student with little or no previous experience in modern dance. May be repeated for a maximum of 4 semester hours with permission of instructor. [G].

1825. Ballet I. (2). Introduction to classical ballet technique; emphasis on barre and center floor work. For student with little or no previous experience in ballet. May be repeated for a maximum of 4 semester hours credit with permission of instructor. [G].

1827. Jazz Dance I. (2). Contemporary jazz dance techniques; emphasis on fundamentals of idiom. For student with little or no previous experience in jazz dance. May be repeated to a maximum of 4 hours with permission of instructor. [G].

2101. Dance Improvisation. (3). Elements of space, time and force; their interrelationships and their specific applications to movement sequences. Experiences in spontaneous development of dance phrases. May be repeated to a maximum of 6 hours with permission of instructor. *Offered alternate years.*

2821. Modern Dance II. (2). (1822). Intermediate modern dance techniques. May be repeated to a maximum of 4 hours with permission of instructor. **PREREQUISITE:** DANC 1821 or permission of instructor. [G].

2825. Ballet II. (2). (1826). Intermediate ballet techniques. May be repeated to a maximum of 4 hours with permission of instructor. **PREREQUISITE:** DANC 1825 or permission of instructor. [G].

2827. Jazz Dance II. (2). (1828). Intermediate jazz dance techniques. May be repeated to a maximum of 4 hours with permission of instructor. **PREREQUISITE:** DANCE 1827 or permission of instructor. [G].

3101. History of Dance. (3). Basic features of and uses for dance and expressive movement from early cultures to present. *Offered alternate years.*

3201. Labanotation. (3). Introduction to Laban method of recording dance; emphasis on reading skills. *Offered alternate years.* **PREREQUISITE:** intermediate level dance technique and permission of instructor.

3829. Advanced Dance Techniques. (4). Intensive development and refinement of dance technique. Focus on artistic concerns appropriate to advanced level. Repeatable for a maximum of 16 hours with permission of the instructor. **PREREQUISITE:** DANC 2821 and 2825 or permission of instructor.

4101. Dance Repertory. (3). Preparation and performance of excerpts from dance master works. Technical and stylistic elements of each work. May be repeated for a maximum of 9 hours. **PREREQUISITE:** permission of instructor.

4201. Dance Composition. (3). Investigation of movement sources and development of elements of choreographic craft. Emphasis on solo and duet work. May be repeated for a maximum of 6 hours with permission of instructor. *Offered alternate years.*

4301. Directed Studies in Dance. (1-3). Individual study, research or practicum. May be repeated for a maximum of 12 hours. **PREREQUISITE:** permission of instructor.

K493 COMMUNICATION STUDIES (COMM)

Associate Professor David L. Appleby, Director

1211. Voice and Articulation. (3). Principles of effective voice usage. Emphasis on improving voice characteristics and diction.

1311. Public Speaking. (3). Principles of ethical and effective public speaking; practice in construction and delivery of original speeches in presence of audience.

1780. Introduction to Human Communication. (3). Principles and processes underlying all human communication. Study of communication models, communication purposes and breakdowns, and variables related to interpersonal, small group, intercultural, and public communication.

1781. Introduction to the Rhetoric of Mass Media. (3). Principles, values, forms, and effects of persuasive public communication. Consideration of rhetorical styles and effects in speeches, debates, documentaries, and dramatic and entertainment forms.

1851. Introduction to Film. (3). Comprehensive study of the forms, functions, and history of film art. Emphasis on developing students' critical skills and aesthetic appreciation through analysis of complex formal, social, historical, and cultural dimensions of the art of film. [G].

3361. African-American Rhetoric. (3). Speeches and rhetoric of African-Americans. Emphasis on spokespersons such as Walker, Turner, Douglass, Washington, DuBois, Malcolm X, King, Davis, and Jackson.

2381. Oral Communication. (3). Principles and practice of basic oral communication forms with emphasis on listening and critical understanding related to contemporary mass media, especially television and film, and to public information and decision-making. [G].

3321. Argumentation and Debate. (3). Theory of argumentation with emphasis on developing skills in analysis, reasoning, and use of evidence in various debate situations and understanding role of debate in public decision-making. PREREQUISITE: COMM 2381.

3322. Theories of Persuasion. (3). Principles underlying any communication designed to influence attitudes or behavior. Includes approaches to motivation, perception, message structure, attention, reasoning, audience analysis, persuasibility, and attitude change. Items for analysis drawn from speeches, advertising, radio, television and film.

3330. Methods of Communication Analysis. (3). Examination and application of qualitative and quantitative methods of criticism and research. [C].

3341. Discussion. (3). Study and practice of principles and techniques of discussion, dealing with current problems of wide interest and significance.

3342. Communication and Leadership. (3). Relationship between communication variables and leadership styles and effectiveness in various organizational and group settings.

3371. Freedom and Responsibility of Speech. (3). Development of freedom of speech as Western value and attendant problems of ethical practice, limitations, and responsibility.

3800. Elements of Broadcasting and Electronic Media. (3). (3881). Survey of broadcast and electronic media dealing with technology, history, programming, economics, advertising, and regulation.

3801. TV Production Techniques for Journalists. (4). For majors in the broadcast journalism sequence; basic principles and techniques of video production. Production exercises. PREREQUISITE: permission of instructor.

3802. Production Techniques for Organizations. (3). Basic television studio, location video and slide/tape equipment, operations and techniques. Emphasis on informational and public relations programming. Not open to Film and Videotape Production students. PREREQUISITE: permission of instructor.

3820. Broadcast Preparation and Performance. (3). Skills required for on-air performance in broadcasting emphasizing use of voice and copy preparation; presentation of public affairs programming, documentary narration, sportscasting, newscasting and combo-announcing.

3821. Radio Production and Studio Operations. (3). (3825). Preparation, production and evaluation of programs, including talk, discussion, interview, music, documentary and special event shows; emphasis on construction, editing, and compilation for broadcast use.

3823. Television and Film Production and Aesthetics I. (4). Basic production skills and theory; photography; audio control and recording; 16mm cinematography; and small format video. Hands-on production exercises. PREREQUISITE: permission of instructor.

3824. Television and Film Production and Aesthetics II. (4). Intermediate production skills and theory in film and video; extensive production exercises. PREREQUISITE: COMM 3823 or permission of instructor.

3842. Television Studio Production I. (4). Techniques of Studio TV production, including staging and direction of programs. PREREQUISITE: COMM 3823.

3861. Television and Culture. (3). Social, political, and aesthetic dimensions of television in modern culture. [W].

4011-6011. Communication in Organizations. (3). (3011). Information flow, communication systems, and communication breakdown in contemporary organizations. Emphasis on business, governmental, and institutional structures.

4013-6013. Communication in Political Campaigning. (3). (3013). Forms and effects of communication between politicians and constituencies; emphasis on campaign rhetoric via mass media, debates, model speeches, etc.

4210-19-6210-19. Special Topics in Communication Studies. (1-3). Topics are varied and announced in *Schedule of Classes*. May be repeated to a maximum of 9 hours when topic varies.

4220-29-6220-29. Special Topics in Film. (1-3). Topics are varied and announced in *Schedule of Classes*. May be repeated to a maximum of 9 hours when topic varies.

4341-6341. Interpersonal and Small Group Communication. (3). Advanced theory in logical, psychological, and sociological investigation of issues in small groups.

4360-6360. History and Criticism of Public Address. (3). Survey and analysis of speeches and speakers vital to social, political, and cultural movements in Western Civilization. Ancient to contemporary times. May be repeated for a maximum of 6 hours.

4373-6373. Interracial Communication. (3). Special problems encountered in communication among races. Readings, discussion, and field study on how prejudice, stereotypes, and self-concepts can affect communication; exploration of rhetorical methods to minimize these problems.

4374. Directed Studies in Communication Arts. (1-3). Independent research in areas of special interest. Includes rhetoric, broadcast and electronic media, and film. PREREQUISITE: permission of instructor.

4375-6375. Intercultural Communication. (3). Special problems encountered in communication between people of different cultural backgrounds. Focus on understanding communicative interaction between and among people with different national/cultural backgrounds and functioning more effectively in multi-cultural settings.

4381. Rhetoric and Public Controversy. (3). Intensive examination of the presentation of public issues in political and entertainment forms (speeches, drama, television, and film).

4704-6704. Theories of Communication. (3). Comparison of theories offered to explain character or effects of mass communication media ranging from Stimulus-Response Theory to Agenda Setting Theory.

4802-6802. Internship. (1-3). Field studies in communication. Supervised practical work with government institution, private business, film company, or broadcast and electronic media firm. Written analysis of experience required. May be repeated for maximum of 6 semesters hours. PREREQUISITE: permission of instructor. (S/U).

4810-6810. Broadcast Regulation and Program Policy. (3). Effects of FCC and other governmental regulations on broadcast and electronic media management and operations. Topics include licensing, renewals, content control, politics, and copyright. PREREQUISITE: COMM 3800.

4811-6811. Radio and Television Programming. (3). Analysis of individual program formats (with examples); use of this information along with ratings and other audience research to study design of program schedules. PREREQUISITE: COMM 3800.

4812-6812. Communications Law in the Performing Arts. (3). Artist, performer, management contractual relationships; acquisition, copyright and disposition of literary and audio-visual properties; production and distribution agreements; advertising law and other matters for TV, motion picture, radio and stage businesses.

4824-6824. Cinematography/Videography. (3). Art of visual interpretation with strong concentration in theory and techniques of lighting. Experience with professional film and video cameras and light equipment. PREREQUISITE: COMM 3824.

4825-6825. Editing of Film and Videotape. (3). Techniques of editing single and double system film and video tape. Overview of total post-production process, but concentrates primarily on aesthetics of continuity. PREREQUISITES: COMM 3823, 3824.

4831-6831. Broadcast and Cable Sales and Advertising. (3). Relation of broadcasting and cable sales and advertising to networks, station representatives and salespeople; role of sponsors, agencies, and allied groups. PREREQUISITE: COMM 3800.

4841. Television Workshop. (4). Production of television programming for local cablecasting. May be repeated for a maximum of 8 semester hours; repetition will not result in a change of any grade previously given. PREREQUISITE: COMM 3842 or permission of the instructor.

4842. Television Studio Production II. (4). (4840). Advanced training in TV studio/multiple camera techniques. Extensive production work. PREREQUISITE: COMM 3842.

4850-6850. Film History I. (3). (4852). Historical survey of motion pictures from medium's pre-history to 1940. Emphasis on narrative film.

4851-6851. Film History II. (3). Historical survey of the major movements, genres, and themes in narrative film from 1940 to 1960.

4853-6853. Documentary Form in Film. (3). Development of non-fiction film as rhetorical and expressive form. Analysis of individual films, genres, and filmmakers.

4854-6854. Documentary Form in Broadcasting. (3). History and criticism of non-fiction broadcasting and cablecasting.

4856-6856. Women and Film. (3). Women as performers, viewers, subjects, and creators in American and international cinema.

4857-6857. History of Broadcast and Electronic Media. (3). Comprehensive study of history of broadcast and electronic media in United States as developed from 1895 to present. Use of primary sources. PREREQUISITE: COMM 3800.

4858-6858. Contemporary Cinema. (3). Major themes and styles in international and American narrative film from 1960 to present.

4871-6871. Broadcast and Cable Management. (3). Theories of management, special problems and situations confronting managers of broadcast and cable outlets, including personnel, engineering operations, programming, and sales functions. PREREQUISITE: COMM 3800.

4891-6891. Producing and Directing for Film and Videotape. (3). Research and script preparation; budgeting and production management; working with actors and crew.

4892-6892. Film and Video Production. (1-3). Film and video production workshop. Class members write, produce, direct, or assume crew responsibilities on productions. May be repeated for a maximum of 6 hours. See departmental guidelines for independent production requirements and procedures. PREREQUISITES: COMM 3824 and permission of instructor.

4960-6960. Documentary Writing. (3). Writing for non-fiction media programs.

4970-6970. Screenwriting. (3). Writing for fiction film and television. Basic dramatic theory, narrative structure, characterization, dialogue, adaptation and the unique demands of the audio-visual media.

K495 THEATRE AND COMMUNICATION ARTS (THCA)

4980. Honors Studies. (3). (COMM). Reserved for students enrolled in Theatre and Communication Arts Honors Program. Students attend 6000 or 7000 level courses to receive undergraduate Honors credit. May be repeated for a maximum of 15 hours. PREREQUISITE: Permission of Director of Theatre and Communication Arts Honors Program.

4982. Honors Seminar. (3). Intensive study of particular problems in communication. May be repeated for a maximum of 12 hours when semester topics vary. PREREQUISITE: permission of Director of Theatre and Communication Arts Honors Program.

4999. Senior Honors Thesis. (3). (COMM 4981). Supervised independent research project. Open only to students enrolled in the Theatre and Communication Arts Honors Program. May be repeated for a maximum of 6 hours. PREREQUISITE: permission of Director of Theatre and Communication Arts Honors Program.

The College of Education

NATHAN L. ESSEX, Ph.D., Dean
Room 215, The College of Education Building

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
Counseling and Personnel Services	Rehabilitation Education	Rehabilitation Education Rehabilitation of the Public Offender	Bachelor of Science in Education (B. S. Ed)
Curriculum and Instruction	Elementary Education		Bachelor of Science in Education (B.S.Ed.)
	Early Childhood Education		Bachelor of Science in Education (B.S.Ed.)
Health, Physical Education and Recreation	Health and Safety	Community Health Emergency Medical Services Health Education	Bachelor of Science in Education (B.S.Ed.)
	Physical Education	Fitness Management Physical Education Instruction Sports Leadership	Bachelor of Science in Education (B.S.Ed.)
	Recreation and Park Administration	Outdoor Recreation Recreation Program Administration Therapeutic Recreation	Bachelor of Science in Education (B.S.Ed.)
Home Economics	Home Economics	Dietetics Food Administration Home Economics Instruction Merchandising-Fashion Merchandising-Home Furnishings	Bachelor of Science in Home Economics (B.S.H.E.)
Special Education (Interdisciplinary)	Special Education		Bachelor of Science in Education (B.S.Ed.)
	Educational Services		Bachelor of Science in Education (B.S.Ed.)

PURPOSES

The College of Education is dedicated to preparing students for careers in a variety of professional and related occupational areas. In helping the university pursue its three broad objectives of teaching, public service and research, The College of Education is committed to the following purposes: (1) to provide programs for preparation of teachers and related school personnel; (2) to provide programs which prepare students for careers as educators in non-school settings; (3) to provide programs for students preparing for careers in related occupational and professional areas; (4) to provide programs and services which enable students to acquire additional preparation needed for continuous professional growth and for changing career objectives; (5) to provide effective personnel services in such areas as advising, licensure, placement, and follow-up to undergraduates, graduates, and educators-in-service; (6) to provide a comprehensive program of research and service to schools and other appropriate agencies in the state, region, and nation; and (7) to provide appropriate programs and services needed by Memphis State University in its continuous efforts to improve the effectiveness of teaching and learning at the university.

AREAS OF PROFESSIONAL TRAINING

The College of Education offers a wide selection of general and specialized programs which are designed to prepare students for a variety of careers:

Careers in Teaching

One of the most important professions in a society is teaching its children and young people. Preparing students to become excellent teachers is a primary goal of the College of Education. A career in teaching offers a wide range of specialization choices and opportunities in nursery, kindergarten, elementary, junior high and senior high schools.

Through the College of Education, there are options for endorsements at the undergraduate level for Elementary Education, Early Childhood Education and Special Education.

Students who wish to prepare for other endorsements in Secondary Education and K-12 teaching fields will be expected to complete a baccalaureate degree in the appropriate teaching area followed by a fifth-year Master of Arts in Teaching program through the College of Education. Recommendation for teacher licensure in these areas is contingent upon successful completion of the Master of Arts in Teaching degree.

Preparation for the various teaching areas includes a significant professional education component which emphasizes both a comprehensive knowledge base and an extensive skills requirement to ensure pedagogical competency. To meet these objectives, there is provision for significant laboratory and field experiences which culminate in an internship in the student's senior year.

Because the entire program of teacher education is undergoing revision and modification, students should ascertain from the department of their interest or the general advisor in the College of Education program requirements that are in effect at the time of application.

Careers in Educational Services

Significant and far-reaching changes have created a society in which the view of education has become more comprehensive and learning has become an integral part of job effectiveness and everyday living. Demands for training in business and industry, health care agencies, government, social service agencies, correction institutions, community agencies, and religious organizations have brought increased emphasis to the need for preparation of educators to provide educational services in a variety of professional practice settings outside traditional school settings. The preparation of these educators is accomplished through



the Bachelor of Science in Education with a major in Educational Services.

This unique major encompasses a professional education component which is directly relevant to the needs of educators in these diverse settings and includes significant field and laboratory based experiences. It also provides for an internship, a supportive collateral studies component, and an individual program planning committee through which the student's personal interests, professional needs and career goals are accommodated.

Careers in Related Occupational and Professional Areas

Career options are available in related occupational and professional areas of Dietetics, Food Administration, Fashion Merchandising, and Home Furnishings Merchandising through the Department of Home Economics. The Department of Counseling and Personnel Services offers training for careers in rehabilitation through three concentration areas: Rehabilitation of the Public Offender, and Rehabilitation Education. Students have the opportunity to prepare for careers in Therapeutic Recreation, Outdoor Recreation, Recreation Program Administration, Community Health, Emergency Medical Services, Health Education, Physical Education Instruction, Fitness Management, and Sports Leadership through the Department of Health, Physical Education, and Recreation. For additional information consult The College of Education General Advisor or the department chair.

College Honors Program

The College of Education Honors Program provides opportunities for students of junior standing to demonstrate excellence

in academic achievement. It offers a series of specially designed honors sections and courses from which 18 semester hours must be taken and a 3.25 quality point average maintained. Specific information about the College Honors Program may be obtained in the Office of the Dean.

ORGANIZATION OF THE COLLEGE

The College of Education is comprised of seven academic departments: Counseling and Personnel Services; Curriculum and Instruction; Educational Administration and Supervision; Foundations of Education; Health, Physical Education and Recreation; Home Economics; and Special Education. Undergraduate degrees are offered by the Departments of Curriculum and Instruction; Health, Physical Education and Recreation; Home Economics; and Special Education. All seven departments offer a variety of graduate degrees and program options. In addition, there are eleven research and service units in the College: Academic Advising, Laboratory Facilities, Office of Student Services, The Bureau of Educational Research and Services, The Center for Higher Education, The Reading Center, The Center for Environmental and Energy Education, The Center of Excellence in Education, The Center for Fitness and Wellness, The Barbara K. Lipman Early Childhood School and Research Institute, and the University Campus School.

Academic Advising

Student advising in The College of Education is an essential support service

provided to assist students in the process of clarifying academic goals consistent with their interests, abilities, values and resources. Advising serves as a means to provide academic, career and professional information so that students can develop personal and career goals and learn of support services and resources available within the university to assist them in attaining their goals.

All undergraduate students entering the college are advised initially by the College of Education general advisor. When entering the college, the advisor assists students in becoming familiar with programs offered in the college and guides them through the beginning phases of their programs. Students are then assigned to faculty advisors or program coordinators in their specific majors. These persons will assist students until graduation. This assistance does not relieve the student of the primary responsibility of studying the catalog and fulfilling all degree requirements.

EDUCATOR PROGRAMS

Professional Studies for Educators

Professional studies in the College of Education consist of both generic courses taken by all persons planning careers as educators and specialized studies related to specific professional practice settings. Professional programs for educators are currently undergoing revision. Students should see the College of Education general advisor or an advisor in the department in which they wish to major for specific requirements.

Teacher Education Programs REQUIREMENTS

Accreditation

The College of Education holds membership in the American Association of Colleges for Teacher Education. Its undergraduate programs as well as all graduate degree programs through the doctor's degree, for the preparation of teachers and related school personnel, are fully accredited by the National Council for Accreditation of Teacher Education (NCATE).

Endorsements in Licensure Areas

Endorsements (program areas of study) which lead to recommendation for teacher licensure at the completion of undergraduate education programs include:

- Elementary Education - (Grades 1-8)
- Early Childhood Education - (Grades K-3)
- Special Education - (Grades K-12)

Recommendation for teacher licensure in any of the following teaching areas is contingent on the completion of a baccalaureate degree in the appropriate academic area followed by completion of the Master of Arts in Teaching degree.

Art Education	Physical Education
Business Education	*Psychology
**Marketing Education	Science
*Driver Education	Biology
English	Chemistry
Foreign Language	Earth & Space Science
French	General Science
German	Physics
Latin	Social Studies
Russian	Broad Fields
Spanish	*Economics
Health Education	*Geography
Industrial Arts Education	*Government
*Librarian	History
Mathematics	*Sociology
Music Education	Speech and Drama
Instrumental Music	Vocational Home
School Music	Economics

*This is not a major licensure area; thus, it must be combined with a major teaching field.

**Typical undergraduate degrees for prospective marketing education teachers are: Bachelor of Business Administration (with a Marketing major), Bachelor of Science in Education (with an Educational Services major), or Bachelor of Science in Home Economics (with a Merchandising major).

Students who intend to enter the Master of Arts in Teaching program should consult with their major advisor or The College of Education General Advisor for information about this program to ensure that the general education curriculum, pre-professional studies, and teaching endorsement requirements are completed.

Admission and Retention

Students who plan to pursue an undergraduate program of studies which leads to teacher licensure must submit a formal application for admission to The College of Education Teacher Education Program (TEP). Students are encouraged to apply for admission as soon as they enroll in professional studies courses.

Prerequisites for formal admission to the Teacher Education Program are currently under revision. Students should consult with the Office of Student Services, Ball Education Building, Room 200 for information about admission and retention requirements.

Students must have been admitted to the Teacher Education Program before advanced level professional education courses are taken. Before admission to TEP, students may continue to enroll in courses in the general education curriculum, and in courses in endorsement areas. **Conditional Admission:** 1. Students who do not meet the admissions criteria will be allowed to obtain Conditional Admission **only** if their deficiencies can be remediated within one semester. Conditional Admission status can be secured for one semester only. 2. Conditionally approved students will be allowed to enroll in professional education courses during their next enrollment period. If at the end of that semester they are not able to meet the criteria for admission, they will be disapproved.

Graduate Licensure Programs: Students who are planning to enter the MAT licensure program must complete the same application procedures as the four-year students during the semester that they enroll in their first preprofessional education course. When admitted to the Teacher Education Program, notification will read "Pending admission to the MAT degree program or the graduate teacher licensure program at Memphis State University".

For a detailed explanation of all requirements and for application forms for admission to the Teacher Education Program, students should consult with The College of Education general advisor.

If all requirements for retention have not been met, a faculty committee will review the student's academic record and other pertinent information and set up an interview with the student. This review may result in a recommendation to the Dean of the College for (1) continuation for a specific provisional period with specified conditions for continuation in the program or (2) dismissal from the program.

Pre-Student Teaching Clinical Experiences

Students pursuing teacher licensure will complete as a part of their program of studies a variety of clinical experiences, which typically will be completed as a requirement built into professional education courses. Students will be expected to have experiences in a variety of settings and with students who reflect differences in age, socio-economic backgrounds and cultural heritage. In some instances, it may be necessary for a student to complete an experience as a free-standing non-credit activity.

Clinical experiences include both laboratory experiences (typically fulfilled on campus) and field experiences (typically fulfilled in K-12 school settings). The amount of time to be spent in a clinical experience will vary according to the specific requirement being met. Fulfillment of these experiences generally requires that students make available out-of-class time between 7:00 a.m. and 4:00 p.m.

Completion of field experiences will occur in sites arranged and approved by the MSU-COE Office of Student Services.

Internship/Student Teaching

Students who are pursuing degree programs at Memphis State University that lead to teacher licensure must complete their student teaching requirements in placements arranged, coordinated and approved by the Director of Student Services of the College of Education. Normally, student teaching assignments are full day in length for a designated number of weeks. Unique situations requiring a different arrangement must be approved by the director.

Internship/student teaching is offered during the fall and spring semesters in area schools. Opportunities are provided for

observation of sound teaching practices and for realistic experiences under the direction of cooperating teachers, culminating in assuming full-time teaching responsibilities.

All students are required to complete a professional semester consisting of a minimum of 15 weeks of internship/student teaching and an associated seminar. NO OTHER COURSES MAY BE TAKEN DURING THE PROFESSIONAL SEMESTER.

Students who have completed all or part of their student teaching experiences before enrolling at Memphis State, and who desire to receive this institution's recommendation for licensure, should expect to complete a minimum of six semester hours of credit in student teaching at Memphis State University.

Grades in student teaching are reported as S (satisfactory) or U (unsatisfactory).

Requirements for enrolling in student teaching/internship are undergoing revision. Please consult the Office of Student Services for information.

Graduation

Requirements for graduation are currently undergoing revision. Students should consult with the College of Education general advisor or with the department in which they seek a degree.

For Tennessee Teacher Licensure, students must obtain satisfactory scores in the Core Battery and Specialty Area Examinations of the National Teacher Examination (NTE), according to the criteria established by the Tennessee State Board of Education.

Any courses taken in excess of those needed to fulfill the requirements of professional education courses and major and minor endorsement areas, are considered to be general electives and are included only in the calculation of the overall QPA. In those areas where students are required to take elective courses, the student in consultation with and approval of the major advisor, designates where the elective courses are to be applied.

CURRICULUM

Course requirements for a Bachelor of Science in Education degree which leads to teacher licensure include successful completion of the general education curriculum, the major, the professional education core, and a major endorsement in one or more teaching areas.

Early childhood and elementary should consult the Office of Student Services about specific general education courses.

I. GENERAL EDUCATION CURRICULUM (51 semester hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Mathematics (3-6 hours): Math 1181 and 1182 or one of the following: MATH 1312, 1321, 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (6 hours): One course from list A and one course from list B.

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (8 hours — sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (3-4 hours): Included in major requirements (Most may be satisfied by taking EDUC 3600 or its equivalent or COMP 1200). Consult advisor.

II. PROFESSIONAL EDUCATION CURRICULUM

The professional education curriculum is currently undergoing revision. Students should consult with the College of Education general advisor or with the department in which they seek a degree.

III. MAJORS AND ENDORSEMENT AREAS

A. Elementary and Early Childhood Education majors are currently undergoing revision. Students should consult with the College of Education general advisor or with the department in which they seek a degree.

B. SPECIAL EDUCATION (21 hours): SPED 3012, 3013, 4012, 4013; EDUC 4901 (9).

IV. SPECIFIC SUBJECT ENDORSEMENTS

Students must complete requirements in at least one major teaching endorsement area and must meet minimum QPA requirements.

A. LICENSES FOR KINDERGARTEN — GRADE 8

1. Elementary License — Grades 1-8

Requirements for 1-8 licensure are undergoing revision. Students should consult with the College of Education general advisor or with the department in which they seek a degree.

2. Kindergarten

Requirements for K-8 licensure are undergoing revision. Students should consult with the College of Education general advisor or with the department in which they seek a degree.

3. Early Childhood Education — K-3

Requirements for K-8 licensure are undergoing revision. Students should consult with the College of Education general advisor or with the department in which they seek a degree.

B. LICENSES - GRADES K-12

1. Special Education

Major Endorsement (28 hours): SPED 2000, 3014, 3015, 3201, 3401, 3501, 3516; ELED 3251 (2), 4242.

2. Driver Education

Major Endorsement: Not available

Minor Endorsement: (23 hours): SAFE 2102, 2202, 4335, 4336, 4337, 4338; EDUC 3600. Electives (6) selected from safety education courses.

Educational Services Program REQUIREMENTS

Admission

Students who wish to prepare themselves as educational services professionals for careers in non-school settings must make formal application for admission to The College of Education. The admission process should be initiated as soon as students enroll in courses in the Professional Studies Core-Level I. All admission requirements must be met before other advanced level professional education courses can be taken; however, students may continue to enroll in courses in the general education curriculum or in the supportive collateral studies component.

Prerequisites for formal admission to the Educational Services Program are as follows:

1. Admission application complete.
2. Grade of C or above in ENGL 1101 and a QPA of 2.0 in any other required English course completed at the time of application.
3. Grade of C or above in one of the following: COMM 1211, 1311, 1780, 1781, 2321, 2381, 2912, 3322, THEA 1212 or 1411.
4. A minimum of 15 semester hours completed.
5. Overall QPA of no less than 2.0.
6. Three recommendations from appropriate individuals addressing the student's ability, communication skills, and personal and professional characteristics.

Retention

Retention in the Educational Services Program is a continuing process. Monitoring student progress will be done at appropriate intervals. The requirements for retention are as follows:

1. Overall QPA of no less than 2.25.
2. Grade of C or above in each required professional education course.
3. QPA of at least 2.25 in all required professional education courses.
4. Grade of C or above in each required course in the supportive collateral studies component.
5. QPA of no less than 2.25 in all courses fulfilling the completion of the supportive collateral studies requirement.
6. Favorable evaluation of student's performance in all required field and laboratory experiences. (Course grades alone may not be used to meet this requirement.)

As long as all requirements are met the student will remain in good standing. If all requirements for retention have not been met, a faculty committee will review the student's academic record and other pertinent information and set up an interview with the student. This review may result in a recommendation for (1) continuation for a specific provisional period with specific conditions or (2) dismissal from the program.

Pre-Internship Clinical Experiences

Students pursuing an Educational Services major will complete, as a part of their studies, clinical experiences in a variety of settings which typically will be completed as a requirement built into professional education courses. In some instances, it may be necessary to complete an experience as a free-standing non-credit rendering activity.

Clinical experiences include both laboratory experiences (typically fulfilled on campus) and field experiences (typically fulfilled off-campus). The amount of time spent in a clinical experience will vary according to the requirement being met. Fulfillment of these experiences will require students to make available out-of-class time. In certain instances, this time may need to be scheduled between 7:30 a.m. and 5:00 p.m.

Completion of field experiences will occur in sites arranged and approved by the MSU-COE Office of Professional Laboratory Experiences.

Internships

Students will be eligible to enroll for the internship during the final year prior to graduation provided the following requirements are met:

1. All courses in the professional education component complete.
2. Overall QPA of no less than 2.25.
3. Grade of C or above in each required professional education course.
4. QPA of no less than 2.25 in all required professional education courses.
5. All courses in the supportive collateral studies component complete.
6. Grade of C or above in each required course in the supportive collateral studies component.
7. QPA of no less than 2.25 in all courses fulfilling the completion of the supportive collateral studies requirement.
8. Faculty committee recommendation.

Graduation

To be recommended for graduation, students must complete the following:

1. Completion of 132 semester hours of which at least 45 hours must be upper division and at least 48-51 hours in liberal content courses.
2. Overall QPA of no less than 2.25.
3. QPA of no less than 2.25 in all courses taken at Memphis State University excluding all credit transferred from other institutions.
4. Grade of C or above in all professional education courses required in Levels I and II.
5. QPA of no less than 2.25 in all required professional education courses.
6. Grade of C or above in all courses fulfilling the completion of the supportive collateral studies component.
7. QPA of no less than 2.25 in all courses fulfilling the completion of the supportive collateral studies component.

NOTE: Any courses taken in excess of those needed to fulfill the requirements of professional education and the supportive collateral studies areas are considered to be general electives and are included only in the calculation of the overall QPA. In those areas where students are required to take elective courses, the student in consultation with and approval of major advisor designates where the elective courses are to be applied.

CURRICULUM

Course requirements for a Bachelor of Science in Education degree in the Educational Services major include successful

completion of (I) the general education curriculum, (II) the professional education curriculum, (III) the supportive collateral studies component, and (IV) selectives.

I. GENERAL EDUCATION CURRICULUM — PRE-PROFESSIONAL STUDIES (48-51 hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321, 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage: (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (6 hours): Select one course from list A and one from list A or B.

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/ HMEC 2101, UNIV 2304.

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (8 hours — sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; or UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course, DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501;

AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (3-4 hours): Included in major requirements (Most may be satisfied by taking EDUC 3600 or COMP 1200). Consult advisor.

II. PROFESSIONAL EDUCATION CURRICULUM (33-39 hours)

A. PROFESSIONAL STUDIES — CORE

	(9)
EDUC 2600 Human Development and Learning Theory	3
EDUC 3000 Principles of Teaching	3
EDUC 3001 Clinical Experience II	1
EDUC 3100 Assessment and Evaluation	2

B. PROFESSIONAL STUDIES — MAJOR (24-30)

EDSV 3350 The Adult Learner	3
EDUC 3600 Applications of Instructional Media	3
EDSV 4150 Process Skills for Trainers	3
EDSV 4350 Instructional Development in Training Settings	3
EDSV 4450 Media Development in Training	2
EDSV 4550 Organization and Management in Training Settings	3
EDSV 4750 Special Problems: Educational Services	1-3
EDSV 4850 Practicum in Training Settings	1-3
EDSV 4800 Professional Seminar	1
EDSV 4950 Internship in Training Settings	6-12
Elective courses to be based upon individual student needs.	

III. SUPPORTIVE COLLATERAL STUDIES

Professional Specialization — (36 hours):

Required core courses — MGMT 3110, MGMT 4420 and COUN 4621 or their equivalents. Courses appropriate for each supportive collateral studies area are selected in consultation with the major advisor. These courses must be approved by the Program Planning Committee and the Program Coordinator.

IV. SELECTIVES (8-17)

GRADUATION

Total 132

Occupational and Professional Programs in Home Economics and Rehabilitation Education

REQUIREMENTS

Graduation

To qualify for a degree in Home Economics or Rehabilitation Education, students must complete the following:

1. Minimum of 132 semester hours of which at least 45 hours must be upper division and at least 48-51 hours in liberal content courses.
2. Overall QPA of no less than 2.0.
3. QPA of no less than 2.0 in all credits earned at Memphis State University excluding all credit transferred from other institutions.
4. QPA of no less than 2.25 in all courses required for fulfilling the completion of the major.

NOTE: Any courses taken in excess of those needed to fulfill the requirements of the major are considered to be general electives and are included only in the calculation of the overall QPA. In those areas where students are required to take elective courses, the student in consultation with and approval of major advisor, designates where the elective courses are to be applied.

CURRICULUM

Course requirements for a degree in one of these areas include successful completion of (I) the general education curriculum and (II) the courses outlined for the major.

I. GENERAL EDUCATION CURRICULUM (48-51 hours):

Courses in the general education curriculum may, if applicable, be used to meet requirements in the major.

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Mathematics (3-6 hours): Math 1181 and 1182 or one of the following: MATH 1312, 1321, 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 1302, PHIL 1102, POLS 1102, UNIV 3581. **NOTE:** Home Economics majors with a Dietetics concentration must take POLS 1102.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.



Social Science (6 hours): One course from list A and one course from list A or list B.

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304. **NOTE:** *Home Economics majors must take HMEC/SOCI 2101.*

B: ANTH 1100, CJUS 1100, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111. **NOTE:** *Home Economics majors with a Dietetics or Merchandising concentration take ECON 2120; Food Administration concentration must take ECON 2110.*

Natural Science (8 hours — sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; UNIV 1610, 1611. **NOTE:** *Home Economics with a Dietetics concentration must take CHEM 1111, 1112.*

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (3-4 hours): Included in major requirements (Most may be satisfied by taking EDUC 3600 or COMP 1200). Consult advisor.

II. MAJORS

A. Home Economics (66-96 hours)

1. **General Home Economics Core:** HMEC 1100, 1101, 2104, 2202, 3301 (same as EDUC 3301), 4300.

2. Concentration Areas:

a. Dietetics (81 hours): HMEC 2102, 3106, 3204, 3302, 3602, 4002, 4102, 4502, 4602, 4802; CHEM 3301, 3302, 3311, 3312, 4511, 4512; BIOL 1731, 1732, 3500; ECON 2110; ISDS 2710, 2750; MGMT 3110, 3215; EDUC 2600; ANTH 1200; SOCI 1111.

b. Food Administration (54 hours): HMEC 2102, 3106, 3302, 3602, 4702001, 4702002, 4502; ACCT 2010, 2020; ECON 2110; ISDS 2710, 2750; MGMT 3110, 3215, 4420; MKTG 3010 or 3011, 3410, 3610.

c. Home Economics Instruction (51-61 hours): HMEC: 1105, 2102, 3106, 3204, 3401, 4405.

For students seeking admission to a graduate teacher preparation program: EDUC 2600, 2601, 3000, 3001, 4701.

15 hours chosen in consultation with advisor from the following courses: HMEC 2004, 2005, 2205, 3302, 4200-003, 4200-007, 4201, 4204, 4304, 4504, 4505, 4602.

18 hours chosen in consultation with advisor in the fields of marketing, merchandising, journalism, or in occupational concentration area.

d. Merchandising (57-63 hours):

Merchandising Core (15 hours): HMEC 2106, 3106, 3206 [C], 4600; ISDS 2750.

Merchandising Business Administration Core (24 hours): ECON 2120; ACCT 2010; and MKTG 3010 or 3011, 6 hours from the following courses: MKTG 3012, 3610, 4080; and any 9 hours of marketing courses approved by the department chair.

Select one from the following (15-21 hours):

Fashion — HMEC 1105, 2005, 4405, 4705 (6 hours). **Home Furnishings** — HMEC 2004, 3204, 4204, 4304, 4504, 4804 (6 hours).

NOTE 1: All Merchandising students: All major subject area courses must be completed before the professional semester required in the Merchandising concentration. A cooperative relationship exists with the

Fashion Institute of Technology in New York City, whereby Home Economics-Merchandising majors may enroll for one semester of study in New York with the semester hours earned being transferred toward graduation at Memphis State University.

NOTE 2: All Home Economics majors: Students in all concentrations must complete the application for practicum by mid-term of the semester before taking the practicum. Students may obtain the form from the major advisor.

B. Rehabilitation Education (79-80 hours)

1. **Rehabilitation Core (54 hours):** COUN 3901, 4611, 4621, 4773, 4903, 4905, 4781, 4941 [6]; PSYC 3101, 3102, 3104, 3506; SOCI 3501, 3831, 4852; HLTH 4102 or 4204; EDRS 4541 or SOCI 3311.

2. Concentration Areas:

Rehabilitation Education (28 hours): SPED 2000, 3501; COUN 4002, 4902, 4782; EDPs 2111; EDSV 3350, 4450; HLTH 4302; SOCI 3521.

Rehabilitation of the Public Offender (29 hours): SPED 3201, 3501; PSYC 3102; 18 hours of work in the fields of criminal justice, counseling, psychology or sociology selected in consultation with and approval of major advisor.

Professional Programs in Health and Safety, Physical Education, and Recreation and Park Administration REQUIREMENTS

Graduation

To qualify for a degree in either Health and Safety, Physical Education, or Recreation and Park Administration, students must complete the following:

1. Minimum of 132 semester hours of which at least 45 hours must be upper division and at least 45 hours in liberal content courses.
2. Overall QPA of no less than 2.0.
3. QPA of no less than 2.0 in all credits earned at Memphis State University excluding all credit transferred from other institutions.
4. QPA of no less than 2.25 in all courses required for fulfilling the completion of the major.

NOTE: Any courses taken in excess of those needed to fulfill the requirements of the major are considered to be general electives and are included only in the calculation of the overall QPA. In those areas where students are required to take elective courses, the student in consultation with and approval of major advisor, designates where the elective courses are to be applied.

GENERAL EDUCATION (51-55 hours)

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182 or one of the following: MATH 1312, 1321, 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500:** CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500:** HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (6 hours): One course from list A and one course from list A or list B.

A: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

B: ANTH 1100, CJUS 1101, ECON 2120, POLS 1100, PSYC 1101, SOCI 1111.

Natural Science (8 hours — sequence required): BIOL 1101, 1102; BIOL 1111, 1112; CHEM 1101, 1102; CHEM 1131, 1121, 1132, 1122; GEOG 1101, 1102; GEOL 1101, 1102; GEOG 1101, GEOL 1101; PHYS 1101, 1102; PHYS 2511, 2512; UNIV 1610, 1611.

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (3-4 hours): For most students, may be satisfied by taking EDUC 3600 or COMP 1200. Consult advisor.

CURRICULUM

Course requirements for a degree with one of these majors include successful completion of General Education and (I) Major Core, (II) Concentrations, and (III) Electives.

I. HEALTH AND SAFETY MAJOR CORE: (29 hours)

HLTH 1102, 1202, 3402, 4102; SAFE 2102, 2202; HMEC 2202; BIOL 1731, 1732.

II. CONCENTRATIONS

A. Community Health (33 hours): HLTH 4182, 4402, 4602, 4802, 4203 or 4204 or 4205; SWRK 2911 or POLS 3601, ANTH 4511 or SOCI 4851; PSYC 3101 or 3102 or 3106; EDRS 4541 [C]; and COUN 4781 or 4782 or 4783.

B. Emergency Medical Services (39-40 hours): SAFE 3302, 3502, 4922; ANTH 4511 or SOCI 4851; HLTH 4203 or 4205, 4402, 4502; BIOL 3730 or CLAS 3021; and COUN 4781.

C. Health Education (31 hours): HLTH 3306, 4203, 4204, 4205; PSYC 3101 or 3102 or 3106; ANTH 4511 or SOCI 4851; COUN 4621; EDUC 2600, 2601, 3000, 3001, and 4701.

III. ELECTIVES (8-21 hours)

MINOR

HEALTH AND SAFETY (24 hours): HLTH 1102, 1202, 3402, 4102, 4204, 4205; SAFE 2102, 2202.

PHYSICAL EDUCATION

I. PHYSICAL EDUCATION MAJOR CORE (31 hours)

PHED 1002, 3403, 3703, 3803, 3903 [W], 4204 [C], 4503; SAFE 2102; BIOL 1731, 1732.

II. CONCENTRATIONS

A. Physical Education Instruction (26-36 hours): PHED 2004, 2005, 2006, 2007, 2008, 2009, 2101, 3303, and 3806; PHED 1713 or 1722; two of the following: PHED 2103, 2203, 2303, 2403, 2503. For students intending to enter the teacher licensure program: EDUC 2600, 2601, 3000, 3001, and 4701.

B. Fitness Management (40 hours): PHED 1003, 1004, 1301, 3503, 3603, 4605; PHED 1712 or 1713 or 1722; one of the following: PHED 1501, 1502, 1503, 1521, 1522, 1523, 1541; MGMT 1010; HMEC 2202; SAFE 3302, 3502; COUN 4611.

C. Sports Leadership (45 hours): RECR 3105 and 4105; PHED 3806, 4305, 4605; COUN 4621; 27 hours selected in consultation with advisor.

III. ELECTIVES (1-24 hours).

MINORS

PHYSICAL EDUCATION (17 hours): PHED 1002, 2006 or 2007, 2008 or 2009, 3403 or 3703, 3903 [W], 4503; one of the following: PHED 2004, 2005, 2103, 2203, 2303, 2403, or 2503.

COACHING (15 hours): PHED 2101, 3403 or 3703, 4613; SAFE 3502; two of the following: PHED 2103, 2203, 2303, 2403, or 2503.

RECREATION AND PARK ADMINISTRATION

I. RECREATION AND PARK ADMINISTRATION MAJOR CORE (30 hours)

RECR 2105, 3105, 3205 [W], 3305, 3605, 3905, 4105, 4405, 4505; SAFE 2102.

II. CONCENTRATIONS (24-32 hours)

A. Therapeutic Recreation: RECR 3102, 3202, 4102, 4605; PHED 3303, 3403; COUN 3901; BIOL 1731, 1732.

B. Outdoor Recreation: RECR 3103, 3203, 4103, 4203 (2), 4605; PHED 1332 or 1333 or 1334; 1782 or 1783; HIST 4861.

C. Recreation Program Administration: RECR 3104, 3204, 4104, 4605; MGMT 3110; ECON 2110; MKTG 3010 or 3011.

III. ELECTIVES (15-27 hours) to be selected in consultation with advisor.

MINOR

RECREATION (24-32 hours): RECR 2105, 3105, 3305, 4105, 4405.

In addition select one of the following program areas:

Therapeutic Recreation: RECR 3102, 3202, 4102; BIOL 1731, 1732.

Outdoor Recreation: RECR 3103, 3203, 4103.

Recreation Program Administration: RECR 3104, 3204, 4104.

Education Course Descriptions

M500 EDUCATION (EDUC)

2600. Human Development and Learning Theory. (3). Theory, research and application of human development and learning processes; emphasis on facilitation of learning outcomes and social behaviors in educational settings. COREQUISITE: EDUC 2601.

2601. Clinical Experience I. (1). Observation and participation in educational settings; emphasis on how teachers utilize developmental concepts and principles of learning with students. COREQUISITE/ PREREQUISITE: EDUC 2600. (S/U).

3000. Principles of Teaching. (3). Research, practices and application of the principles of instruction which promote effective teaching and facilitate cognition. PREREQUISITES: EDUC 2600, 2601. COREQUISITE: EDUC 3001.

3001. Clinical Experience II. (1). Laboratory and practicum experience integrating principles of learning and development with principles of teaching. PREREQUISITES: EDUC 2600, 2601. COREQUISITE: EDUC 3000.

3100. Assessment and Evaluation. (2). Overview of assessment and evaluation techniques in relationship to intended learning outcomes. [C].

3200. Interpersonal Skills for Educators. (2). Development of human relations skills which facilitate learning process. PREREQUISITE: Required COMM course.

3301. Child Development and Learning Theory. (2). (Same as HMEC 3301). Principles of human development and learning processes as they relate to infancy, early and middle childhood years.

3302. Adolescent Development and Learning Theory. (2). Principles of human development and learning as they relate to adolescence.

3401. Teaching the Exceptional Learner. (2). Overview of field of special education; characteristics and education of various exceptionalities; emphasis on developing skills for effective teaching of exceptional child in regular classroom setting.

3501. Classroom Management. (2). Utilization of appropriate knowledge and skills for managing the total classroom environment; emphasis on development of skills which facilitate effective teaching through constructive management techniques.

3600. Applications of Instructional Media. (3). Preparation and use of instructional media in school and training settings, including audiovisuals, television and microcomputer applications in instruction.

3900. Education Honors Program Colloquium. (3). Interdisciplinary colloquium on a broad education theme or topic. PREREQUISITE: junior standing and permission of the Education Honors Council.

4601. Educational Foundations for Teachers. (2). Historical philosophical, and socio-cultural dimensions of American education; focus on developing a personal model of education which accommodates both current needs and future planning in K-12 setting.

4701. Clinical Experience III. (2). Seminars and participation as assistant to classroom teacher;

emphasis on teacher roles and on adapting subject discipline to school curriculum. PREREQUISITES: EDUC 2600, 2601, 3000, 3001. (S/U).

4901. Internship for Teachers. (3-9). Full-time planned and supervised experience in a setting appropriate to the student's area of specialization providing opportunities to synthesize knowledge and skills and to demonstrate professional competencies in an educational setting. PREREQUISITE: approval in advance. (S/U).

001 Student Teaching in Elementary School
002 Student Teaching in Kindergarten
003 Student Teaching in Special Education
004 Student Teaching in Secondary School
005 Student Teaching in Art
006 Student Teaching in Business Education
007 Student Teaching in Marketing Education
008 Student Teaching in Health
009 Student Teaching in Industrial Arts
010 Student Teaching in Instrumental Music
011 Student Teaching in School Music
012 Student Teaching in Physical Education
013 Student Teaching in Vocational Home Economics

4902. Internship for Teachers. (3-6). Additional student teaching experience in same areas available in 4901. (S/U).

EDUCATIONAL SERVICES

M550 EDUCATIONAL SERVICES (EDSV)

3350. The Adult Learner. (3). (EDUC). Variety of learning patterns and developmental characteristics of adults; emphasis on applications in programs or other activities for adult learners.

4150. Process Skills for Trainers. (3). (EDUC). Development of personal skills which will enhance the trainer's ability to interact with people in training environments.

4350. Instructional Development for Training. (3). (EDUC). Instructional development techniques and applications in training settings; principles of curriculum development, instructional delivery, and evaluation.

4450. Media Development for Training. (2). (EDUC). Practical preparation of audiovisual material for training, applying instructional design techniques; development of media presentation skills. PREREQUISITE: EDSV 4350 or permission of instructor.

4550. Organization and Management of Training Programs. (3). (EDUC). Development and management of instructional programs in non-school settings; focus on goals, personnel, operational, and budgetary considerations. PREREQUISITE: MGMT 3110.

4750. Special Problems: Educational Services. (1-3). (EDUC). Independent study and field projects on selected problems, interests, and needs related to educational programs in training settings.

4800. Professional Seminar. (1). (EDUC). Extension of student's professional preparation through a series

of required and elective activities; exploration of issues and topics related to professional development. Serves as a capstone experience for synthesizing the student's professional preparation program. COREQUISITE: EDSV 4950. (S/U).

4850. Practicum in Training Settings. (1-3). (EDUC). Opportunities to gain experience in a variety of settings; tailored to interests, needs and career pathways of student. PREREQUISITE: approval by program coordinator. (S/U).

4950. Internship in Training Settings. (3-12). Planned and supervised full-time experience in a training setting appropriate to the student's specialization area; opportunities to synthesize knowledge and skills and demonstrate professional competencies in an appropriate setting. PREREQUISITE: approval in advance by program coordinator. COREQUISITE: EDUC 4800. (S/U).

COUNSELING AND PERSONNEL SERVICES

ASSOCIATE PROFESSOR

ROBERT L. CRAWFORD, *Interim Chair*
Room 113, Patterson Building

The Department of Counseling and Personnel Services offers a Bachelor of Science in Education with a major in Rehabilitation Education. There are two concentrations: Rehabilitation of the Public Offender and Rehabilitation Education.

M731 COUNSELING AND PERSONNEL SERVICES (COUN)

1661. Career Development. (3). Relationship of interests, aptitudes and careers. Includes exploration of work settings and activities to support individual career planning. Students expected to investigate work settings, relate this investigation to academic programs, and utilize this information in individual career development.

3901. Introduction to Disabling Conditions and Their Helping Professions. (3). (SPER). Physical, mental and socially disabling conditions and their effect on lives of handicapped and their families. Roles of various helping professions in rehabilitation of such conditions.

4002. Independent Study in Counseling. (1-3). Opportunity for self-directed study and/or research under the supervision of faculty member. *May be repeated for a maximum of 6 semester hours credit.* PREREQUISITE: consent of faculty member. (S/U).

4010-29. Special Topics in Counseling and Personnel Services. (3). Topics are varied and announced in *Schedule of Classes*.

4611-6611. Introduction to Counseling. (3). Exploration of history, principles and administration of counseling services in community agencies, schools, business and industry. Application of human relations



experiences to personal growth and interpersonal relationships. Survey of applicable counseling services, skills and techniques.

4621. Humanistic Interactions. (3). Human relations exercises and other personal experiences related to effective learning climates. Includes communication skills for working in groups, one-to-one relationships, and identification and referral of persons to appropriate resources.

4691-6691. Residence Hall Staff Counseling and Advising. (3). Practical experience for residence hall staff. Instruction and supervision provided. Individual and group activities in counseling, advising, communication, and leadership. Concerns such as drug abuse, family planning information, and student discipline. Utilizes interdepartmental disciplines.

4693. Leadership Development (3). Supervised experiences for developing or refining leadership skills. Practice in leadership style, communication, motivation, negotiation, conflict resolution, and parliamentary procedures.

4760-79-6760-79. Workshops in Counseling. (1-3). Opportunity for growth for professionals in field of guidance and counseling. Application and study in field designated by specific workshop number. Student expected to develop appropriate skills and attitudes.

NOTE: Not more than 9 semester hours of Workshop credit can be applied toward a degree.

4773-6773. Workshop in Group Process. (1-3).

4774-6774. Workshop in Community Services. (1-3).

4775-6775. Workshop in Student Appraisal. (1-3).

4776-6776. Workshop in Career Counseling. (1-3).

4778-6778. Workshop in Counseling. (1-3).

4781-6781. Counseling Strategies for Crisis Intervention. (3). Process of crisis intervention. Study and practice in understanding crisis induced dysfunctional behavior, recognizing crisis situations, and crisis counseling procedures. Students to demonstrate competency in assisting in safely disengaging crisis participants, providing follow-up and referral.

4782-6782. Gerontological Counseling. (3). Survey of demographic, developmental, physiological and psychosocial aspects of aging as applied to counseling. Experiences in use of appropriate individual and group counseling techniques for aged; emphasis on particular crisis situations such as retirement, leisure, relocation, housing, institutionalization, dying, death, and survivorship.

4783-6783. Alcohol and Drug Abuse Counseling. (3). Process of counseling alcoholic and drug dependent persons. Study in modalities of treatment, philosophy of treatment, and referral.

4784-6784. Therapeutic and Management Techniques with Substance Abusers. (3). Methods utilized in treatment of substance abuse; individual and

group counseling techniques, as well as in-patient and out-patient programs. PREREQUISITE: COUN 4783.

4902. Social and Psychological Adjustments to Disabling Conditions. (3). (SPER). Social and psychological ramifications of disabling conditions. Theories dealing with adjustment to physical disabilities explored and extrapolated to mental and social disabilities.

4903. Theories of Counseling and Helping Techniques. (3). (SPER). Focus on examining theories of human behavior and helping process as it relates to working with disabled persons. Theories of Combs, Carkhuff and others.

4905. Assessment Techniques in Counseling. (3). (SPER). Use of biographical, psychological, medical and job information for case planning.

4941. Practicum in Rehabilitation. (3-6). (SPER). Practical experiences in various rehabilitation settings. PREREQUISITE: COUN 3901 or consent of instructor. (S/U).

CURRICULUM AND INSTRUCTION

PROFESSOR THOMAS A. RAKES,

Interim Chair

Room 424, The College of Education Building

M650 ELEMENTARY EDUCATION (ELED)

2211. Introduction to Early Childhood Education. (3). Principles, practices, and evaluation of early childhood education programs; teacher's role and children's characteristics from infancy through third grade. Observations in varied socio-economic day care centers, kindergartens, and primary grades. *Two lecture, two laboratory hours per week.*

3111. Early Childhood Social Studies and Children's Literature. (3). Evaluation and implementation of curriculum, instructional materials, teaching methods and strategies, and organization principles for teaching social science concepts and literature to children from four through ten years. Supervised lab experience in varied socio-economic day care centers, kindergartens, and primary grades. *Two lecture, two laboratory hours per week.*

3121. Early Childhood Mathematics and Science. (4). Evaluation and implementation of curriculum, instructional materials, teaching methods and strategies, and organizational principles for teaching math and science to children from four through ten years. Supervised lab experiences in varied socio-economic day care centers, kindergartens, and primary grades. *Three lecture, two laboratory hours per week.*

3241. Teaching Language Arts: Elementary School. (3). Scope and sequence of skills, assessment, organizational strategies and materials for listening, speaking and writing. Interrelatedness of these skills emphasized through activities which teach children to think and communicate. *Two lecture, two laboratory hours per week.* PREREQUISITES: EDUC 2600, 3301.

3251. Teaching Mathematics: Elementary School. (2-3). Emphasis on methods and materials for teaching mathematics to elementary school student. PREREQUISITES: EDUC 2600, 3301.

3261. Teaching Science: Elementary School. (3). Emphasis on methods and materials for teaching science to the elementary school student. PREREQUISITES: EDUC 2600, 3301.

3271. Teaching Social Studies: Elementary School. (2). Emphasis on methods and materials for teaching social studies to elementary school student. PREREQUISITES: EDUC 2600, 3301.

4242. Teaching Reading: Elementary School. (2). Scope and sequence of decoding and comprehensive skills; approaches; materials; and instructional techniques appropriate in K-8 grades. *One lecture, two laboratory hours per week.* PREREQUISITE OR COREQUISITE: ELED 3241 or classroom experience.

4243. Teaching Reading: Assessment, Correction. (2). Emphasis on assessment of reading levels, skills, materials and methods for different learning styles. Clinical experience required. PREREQUISITES: ELED 3241, 4242; or SCED 4342.

4344. Teaching Reading: Elementary School Content Areas. (2). Methods, materials, and organizational patterns by which reading skills can be developed and improved with other communication skills through integration with teaching strategies in content subjects. *One lecture, two laboratory hours per week.*

4411. Home School Relationships in Early Childhood Education. (3). Parent-Teacher-Child relationships; conferring, interviewing, reporting procedures and techniques; pupil evaluation methods; typical child characteristics. Supervised lab experiences in varied socio-economic day care centers, nursery schools, kindergartens, and primary grades. *Two lecture hours, two lab hours per week.* PREREQUISITES: ELED 3111, 3121.

M670 SECONDARY EDUCATION (SCED)

The methods courses in high school subjects include objectives, content, and grade placement of subject; tools of instruction, organization of courses; and teaching procedures and practices. Field/laboratory experiences required.

3322. Materials and Methods in Secondary Music. (3). (Same as MUSE 4203).

3341. Materials and Methods in Secondary English. (3).

3346. Materials and Methods in Secondary Speech (3).

3348. Materials and Methods in Secondary Foreign Language. (3).

3351. Materials and Methods in Secondary Mathematics. (3).

3362. Materials and Methods in Secondary Science. (3).

3371. Materials and Methods in Secondary Social Studies. (3).

3376. Methods of Teaching Shorthand. (2). (3381).

3377. Methods of Teaching Typewriting and Office Practice. (2). (3381).

3378. Methods of Teaching Bookkeeping, Accounting, and Data Processing. (2). (3382).

3379. Methods of Teaching General Business, Economics, Business Law, and Salesmanship. (2). (3382).

3383. Materials and Methods in Secondary Home Economics. (3). (Same as HMEC 4383).

4341. Teaching Literature for Adolescents. (3). Theories and techniques of teaching literature for adolescents at secondary level; survey and analysis of appropriate fiction, drama, and poetry for teenage reader.

4342. Teaching Reading: Secondary Content Areas. (2). Methods, materials, and organizational patterns by which reading skills can be developed and

improved with other communication skills through integration with teaching strategies in content subjects.

4441. Secondary School Curriculum. (2). Typical and innovative curricular programs for secondary schools.

M675 CURRICULUM AND INSTRUCTION (CIED)

3901. Special Problems in Instruction. (1-6). Individual investigation in area of instruction. PREREQUISITE: experience as teacher or satisfactory evidence of being qualified to benefit from course.

4111-6111. Library Materials for Children. (3). (LIBS 4111). Evaluation and selection of books and related library materials for leisure interests and curriculum needs of elementary school children; extensive reading, introduction to selection criteria, bibliographic aids, authors and illustrators and types of literature and information books.

4121-6121. Library Materials for Young People and Adults. (3). (LIBS 4121). Evaluation and selection of books and related library materials for leisure interests and curriculum needs of young people and adults from junior high school up; extensive reading, introduction to selection criteria, bibliographic aids, authors and illustrators, and types of literature and information books.

4450. Individualized Instruction Practicum. (1-3). Implementation of instruction in individual and small group situations for learners experiencing difficulty in selected basic skills areas: requires design and delivery of tutorial type instruction under guidance of supervisory personnel. Repeatable to maximum of 9 semester hours. (S/U).

4601-6601. Workshop in Curriculum and Instruction — Environmental Education. (3). Current, relevant environmental issues with emphasis on resources and appropriate strategies for application of knowledge.

4701-09-6701-09. Workshops in Curriculum and Instruction. (1-9). Various areas of curriculum and elements of instruction explored. Active student participation included. See *Schedule of Classes* for specific topic. Repeatable for credit for a maximum of 9 semester hours in any one topic.

4761-6761. Aerospace Education in Schools. (3). Aerospace content and flight experiences. Emphasizes classroom application.

4950-59-6950-59. Special Topics in Curriculum and Instruction. (1-3). Current topics in areas of curriculum and instruction at all levels. May be repeated with change in topic and content. See *Schedule of Classes* for specific topic.

DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND SUPERVISION

ASSOCIATE PROFESSOR
SAM LUCAS, *Interim Chair*

Room 101, The College of Education Building

The Department of Educational Administration and Supervision offers majors at the graduate level only.

FOUNDATIONS OF EDUCATION

PROFESSOR CARLTON H. BOWYER,
Chair
Room 404, The College of Education Building

The Department of Foundations of Education offers majors at the graduate level only.

M700 EDUCATIONAL FOUNDATIONS (EDFD)

4008. Special Problems in Cultural Foundations of Education. (1-3). Individually directed reading, field

study or research; written report required. PREREQUISITES: permission of department chair and instructor.

4051-6051. Anthropology and Education. (3). (Same as ANTH 4051). Cultural transmission process; emphasis on identifying different behavioral, cognitive, and learning styles of various ethnic groups within American society, selected third world countries and U. S. subcultural groups within public education system.

M710 RESEARCH METHODOLOGY AND STATISTICS (EDRS)

4518. Special Problems in Educational Measurement. (1-3). Individually directed reading, field study or research; written report required. PREREQUISITES: permission of department chair and instructor.

4530-6530. Microcomputers in Education: Theoretical and Technical Foundations. (3). History, development, and status of microcomputers in education and introduction to the technical knowledge and skills needed to operate microcomputers for specialized educational applications. Prerequisite knowledge for more advanced computer-related training in different education specialty areas.

4541. Fundamentals of Applied Statistical Methods. (3). Use of statistical techniques in education and behavioral sciences; emphasis on practical use and interpretation of concepts. Self-instructional. [C].

4542. Fundamentals of Applied Research. (3). Basic research designs, problem of replicability, and methodology used in proposing and reporting research; emphasis on referencing and interpreting research literature.

M720 EDUCATIONAL PSYCHOLOGY (EDPS)

2111. Human Growth and Development. (3). Life-span approach to principles and processes of human growth and development.

4108. Special Problems in Educational Psychology. (1-3). Individually directed reading, field study or research; written report required. PREREQUISITES: permission of department chair and instructor.

HEALTH, PHYSICAL EDUCATION, AND RECREATION

PROFESSOR MELVIN A. HUMPHREYS,
Chair
Room 106, Field House

M736 HEALTH, PHYSICAL EDUCATION AND RECREATION (HPER)

1100. Concepts of Fitness and Wellness. (2). Emphasis on individual responsibility for achieving optimal well-being and preventive health practices which promote healthful lifestyles and reduce risk factors. [G].

M740 HEALTH (HLTH)

1102. Personal Health. (3). Concepts of personal health including chronic and infectious diseases, sexually transmitted diseases, mental health, substance use and abuse, health consumerism, sexuality, aging, and death and dying.

1202. Introduction to Community Health. (3). Purpose, roles, responsibilities and services of community health agencies; environmental health, sanitation, public health, community relations and health career trends and issues.

3102. Materials and Methods in Health Education. (3). Methods, materials, and resources for health teaching; emphasis on improving health behavior through sound health teaching.

3202. The School Health Program. (3). Historical and philosophical study of growth and development of health education, including school health programs, health services, healthful school environment and health instruction.

3306. Elementary School Health Education. (3). School health program involving health services, healthful school living, health screening, home and

school safety; health content, skills and materials suitable for elementary education; first aid with CPR.

3402. Chronic and Communicable Diseases. (3). Modern concepts of disease; etiology, screening, detection, prevention and control of common communicable and chronic diseases.

4102. Critical Issues in Health. (3). Critical and controversial issues of health explored.

4182-6182. Health Aspects of Gerontology. (3). Current issues and trends in gerontology on the health and quality of life of the aging.

4202-20-6202-20. Workshop in Health. (1-9). Selected phases of health and health education through group study. In-depth study in areas of interest to persons in health education and related fields.

4203-6203. Workshop in Death and Dying. (1-3).

4204-6204. Workshop in Sexuality Education. (1-3).

4205-6205. Workshop in Drug Education. (1-3).

4302-6302. Observation in Community Health Agencies. (3). Introduction to purposes, objectives, functions and programs of community health and welfare agencies, with opportunities to visit public and private agencies and interview various representatives.

4402. Practicum in Public Health Education. (1-9). Field experience in public health education. Practical work under supervision of government or voluntary agencies. May be repeated for a maximum of 18 hours. (S/U).

4502. Problems in Health Education. (1-3). Independent study or research project on selected health problems or issues. PREREQUISITE: consent of instructor.

4602-6602. Organization and Administration in Public Health. (3). Basic functions, principles, and procedures of organization and administration as applied to health. Emphasis on relationship and responsibilities of personnel in planning, promoting, improving and evaluating total health activities in family-centered health services.

4802-6802. Environmental Health. (3). Survey of complex association between environment and human productivity, health, and happiness. Environmental factors within the general framework of ecological perspective in which the interrelationships of all living things to one another affect human growth and well-being.

4902-11-6902-11. Special Topics in Health. (1-3). Current topics in health. May be repeated with change in topic and content. See *Schedule of Classes* for specific topics.

M745 SAFETY EDUCATION (SAFE)

2102. First Aid and Emergency Care. (3). (HLTH 2102). Safety skills and techniques of immediate and temporary care in event of injury or sudden illness. Successful completion qualifies student for First Aid certificate endorsed by the National Safety Council.

2202. Safety Education. (3). (HLTH 2202). Causes of accidents and action designed for prevention of accidents in home, school, and community. Content and materials for safety education in school instructional program.

2703. Water Safety Instructor. (3). (PHED 2703). Analysis, practice, and teaching of swimming and life saving skills and general water safety practice. PREREQUISITE: PHED 1722.

3302. Cardiopulmonary Resuscitation and Emergency Life Support. (3). Basic life support techniques of Cardiopulmonary Resuscitation and other emergency life support situations. Successful completion qualifies student for certification in basic life support course Cardiopulmonary Resuscitation (CPR) by the American Heart Association.

3406. Lifeguarding and Pool Management. (2). Theory and application of life-guarding skills, pool management, records/reports and pool maintenance and sanitation. PREREQUISITE: PHED 1722 or Red Cross Advanced Lifesaving Certificate; SAFE 2102 or equivalent; and SAFE 3302 or Red Cross or Heart Association CPR/ Basic Life Support.

3502. Prevention and Care of Athletic Injuries. (3). (HLTH 3502). Practical and theoretical aspects of treatment of athletic injuries in athletic training program supplies, training table, therapeutic equipment, and

techniques in conditioning and bandaging. PREREQUISITE: SAFE 2102 or consent of instructor.

4207-16-6207-16. Workshop in Driver and Traffic Safety Education. (1-3). For in-service and prospective teachers of grades 7-12. Improvement of teaching/learning process as applied to driver and traffic safety education. Attention to common elements of teaching methodology, utilization of appropriate driver and traffic safety education materials and resources and evaluative criteria.

4335-6335. Driver and Traffic Safety Education I. (3). (SCED 3335) Basic knowledge and skills to deal with problems of vehicular traffic. Defensive driving and driver improvement techniques stressed. Students desiring teacher certification must enroll concurrently in SAFE 4336 for one semester hour in order to complete laboratory requirements.

4336-6336. Driver and Traffic Safety Education — Lab I. (1). Laboratory experiences dealing with classroom and in-car instruction. Required for all students desiring certification in driver education. To be taken concurrently with 4335. Two hours each week.

4337-6337. Driver and Traffic Safety Education II. (3). (SCED 3336) Advanced driver and traffic safety educational activities. Includes study of current research in accident causation and prevention. Students desiring teacher certification must enroll concurrently in SAFE 4338 for one semester hour in order to complete laboratory requirements.

4338-6338. Driver and Traffic Safety Education — Lab II. (1). Laboratory experiences dealing with classroom, in-car multi-vehicle range and simulation instruction. To be taken concurrently with 4337. Two hours each week.

4402. Internship in Health and Safety. (1-9). Supervised experience in a setting appropriate to the student's area of specialization; opportunity to apply professional competencies. May be repeated for a maximum of 18 hours when taken in different settings. PREREQUISITE: Approval in advance. (S/U).

4902-11-6902-11. Special Topics in Safety Education. (1-3). Current topics in safety education. May be repeated with change in topic and content. See *Schedule of Classes* for specific topic.

4922. Emergency Medical Technology. (9). Pre-hospital emergency care for the Emergency Medical Technician. Recognition and treatment of traumatic and nontraumatic injuries, medical emergencies; observations of local emergency medical service providers. Successful completion will qualify student for State Certification Examinations. PREREQUISITES: Junior standing, SAFE 2102 and 3302; or consent of instructor.

M750 PHYSICAL EDUCATION (PHED)

Required physical activity courses may be selected from the courses numbered 1000 through 1951. See Note 4 below for full listing of physical activity course options.

NOTE 1: The prerequisite for each advanced activity course is the introductory course or its equivalent.

NOTE 2: Any student except those with a major or minor in Physical Education has the option of taking these activity courses for a letter grade or on a credit/no credit basis. Students majoring in the Fogleman College of Business and Economics should check with their advisor before registering on a credit/ no credit basis.

NOTE 3: PHED 1001, 1003, 1004 and 1006 may be repeated once for credit. ALL other physical activity courses (1000-1951) may not be repeated unless title and content vary.

NOTE 4: The university general education fitness and wellness requirement, including approved physical activity courses, is as follows:

Fitness and Wellness (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

1001. Figure Control and Conditioning. (2). May be repeated once for credit. [G].

1002. Fitness for PHED Majors. (2). Introduction to the components of physical fitness. Emphasis on development of and participation in exercise programs

for each component and evaluation techniques for measuring progress. [G].

1003. Aerobics. (2). May be repeated once for credit. [G].

1004. Jogging. (2). May be repeated once for credit. [G].

1005. Conditioning for Varsity Sports. (2). (1001003). Open only to varsity athletes, cheerleaders, and members of the pom pom squad. May be repeated once for credit. [G].

1006. Water Aerobics. (2). May be repeated once for credit. [G].

1010-19. Selected Physical Education Activities. (1-3). Current activities in physical education. See *Schedule of Classes* for specific activity. May be repeated with a change in topic. [G].

1201. Adaptive Activity. (2). May be repeated for a maximum of 4 hours. [G].

1202. Juggling. (2). [G].

1301. Nautilus. (2). [G].

1302. Free Weights and Machines. (2). (1301001) [G].

1331. Camping. (2). [G].

1332. Advanced Camping. (2). [G].

1333. Backpacking. (2). (1331001). [G].

1334. Advanced Camping. Rock Climbing. (2). (1332001). [G].

1335. Advanced Camping. Caving. (2). (1332003) [G].

1361. Equitation: Western Style. (2). (1361001) [G].

1412. Judo. (2). [G].

1413. Self Defense Techniques. (2). (1412001). [G].

1441. Karate. (2). [G].

1442. Advanced Karate. (2). [G].

1461. Fencing. (2). [G].

1462. Intermediate Foil Fencing. (2). [G].

1501. Tennis. (2). [G].

1502. Intermediate Tennis. (2). [G].

1503. Advanced Tennis. (2). (1502). [G].

1521. Racquetball. (2). [G].

1522. Intermediate Racquetball. (2). [G].

1523. Advanced Racquetball. (2). (1522). [G].

1531. Handball. (2). [G].

1541. Badminton. (2). [G].

1551. Archery. (2). [G].

1561. Bowling. (2). [G].

1562. Intermediate Bowling. (2). [G].

1571. Golf. (2). [G].

1572. Intermediate Golf. (2). [G].

1573. Advanced Golf. (2). (1572). [G].

1581. Recreational Games. (2). [G].

1582. Recreation Games: New Games. (2). (1581001). [G].

1621. Gymnastics. (2). [G].

1623. Cheerleading Stunts and Tumbling. (2). (1621003). [G].

1624. Stunts and Tumbling. (2). (1621004). [G].

1711. Beginning Swimming. (2). [G].

1712. Elementary Swimming. (2). [G].

1713. Intermediate Swimming. (2). [G].

***1722. Swimming — Lifeguarding.** (2). [G].

***1741. Advanced Swimming.** (2). [G].

1742. Conditioning Through Swimming. (2). (1741001). [G].

***1771. Scuba.** (2). [G].

***1772. Advanced Scuba.** (2). [G].

***1781. Boating and Small Craft.** (2). [G].

1782. Kayaking. (2). (1781001). [G].

1783. Canoeing. (2). (1781002). [G].

1811. Rhythms for Elementary School. (2). [G].

1812. Square and Round Dance. (2). American square, round and contra dance. [G].

1813. Folk and Social Dance. (2). International folk dance and American ballroom and social dance. [G].

1921. Basketball. (2). [G].

1923. Volleyball. (2). [G].

1924. Intermediate Volleyball. (2). [G].

1931. Soccer and Fieldsports. (2). [G].

1941. Track and Field Events. (2). [G].

1951. Team Handball. (2). [G].

*The prerequisite for these courses is Physical Education skills 1713.

2004. Team Sports (Basketball and Volleyball). (2). Knowledge, skills and techniques for prospective physical educator.

2005. Team Sports (Soccer, Touch Football, Track and Field). (2). Knowledge, skills and techniques for prospective physical educator.

2006. Individual Sports (Badminton, Bowling, Archery and Recreational Games). (2). Knowledge, skills and techniques for prospective physical educator.

2007. Individual Sports (Tennis and Golf). (2). Knowledge, skills and techniques for prospective physical educator.

2008. Stunts, Tumbling and Gymnastics. (2). Techniques and skills in stunts, tumbling and gymnastics; emphasis on selection, utilization of spotting skills, characteristics of skills and performance assessment of students K-12.

2009. Dance (Elementary, Folk and Square). (2). Skills and knowledge for prospective physical educator.

2101. Principles of Coaching. (2). Analysis of scientific, administrative, and organizational principles applied to coaching of athletic teams.

2103. Fundamentals and Techniques of Football. (2). Coaching techniques, training and conditioning methods appropriate to football.

2403. Fundamentals and Techniques of Baseball and Softball. (2). Coaching techniques, training and conditioning methods appropriate to baseball and softball.

2503. Fundamentals and Techniques of Volleyball. (2). Coaching techniques, training and conditioning methods appropriate to volleyball.

3303. Adapted Physical Education. (3). Lectures, demonstrations, and problems of mechanics of physical deformities and their causes; abnormalities of spine, feet, and other postural and functional conditions; and methods of class organization. Two lecture hours per week, plus laboratory periods to be arranged.

3503. Health Aspects of Physical Fitness. (3). Health related aspects of physical fitness focusing upon relationship between exercise and chronic diseases, longevity, stress, anxiety and depression, and orthopedic considerations.

3603. Physiological Basis of Strength and Endurance. (3). General and specific view of the two main components of physical fitness.

3703. Physiology of Exercise. (3). Scientific basis of physiological principles of various systems and organs of the body during muscular activity. Emphasis on principles of motor performance and training. PREREQUISITES: BIOL 1731 and 1732.

3803. Motor Learning and Development. (3). Principles of motor development and learning and their relationship to motor learning and performance.

3806. Physical Education for Young Children. (2-3). Physical education for early childhood through 6th grade; philosophy, program planning and practical experience; observing and directing play activities for children. Laboratory experiences to be arranged.

3807. Teaching Methods and Curricular Principles Applied to Physical Education. (3). Application of teaching methodologies and curriculum development principles to physical education programs K-12. Laboratory experiences required.

3903. History and Principles of Physical Education. (3). (2903). Origin and nature of modern physical education as developmental experience and medium of education. Scientific and philosophical principles of physical education. [W].

4102-11-6102-11. Workshop in Physical Education, Sport and Dance. (1-6). Selected phases of physical education, sport or dance through group study. In-depth study of area of interest and need for physical education teachers, coaches and administrators. May be repeated with a change in topic.

4204. Tests and Measurements in Physical Education. (3). Measurement techniques, tools and resources and their application to assessment of physical performance and fitness factors. Laboratory experiences required. [C].

4303. Problems in Physical Education. (1-3). Independent study and/or research project on selected physical education problem, issue or concern. PREREQUISITE: permission of instructor.

4305. Professional Experiences In Physical Education. (1). Practical experiences in variety of on-campus settings related to students training and experience.

4401-6401. Electrophysiology and EKG Interpretation. (3). Introduction to electrophysiology of muscle cells; emphasis on cardiac muscle cells; mechanics and interpretation of EKG.

4403-6403. Kinesiology. (3). (3403). Analysis of selected anatomic systems as related to purposeful movement of the human body. PREREQUISITES: BIOL 1731 and 1732 or consent of instructor.

4503. Organization and Administration of Physical Education. (3). Administrative problems of physical education, including curriculum, facilities, buying and caring for equipment, general class organization, and organization of intramural program.

4605. Internship In Physical Education. (3-9). Culminating experience allowing students the opportunity to demonstrate knowledge and skills in an appropriate professional setting based upon their training and experience. PREREQUISITE: approval in advance. (S/U).

4613-6613. Management and Care of Athletic Facilities and Equipment. (3). Modern techniques and procedures used in management of interscholastic and intercollegiate athletic facilities. Additional emphasis on selection and care of appropriate functional athletic equipment.

4902-11-6902-11. Special Topics in Physical Education. (1-3). Current topics in physical education. May be repeated with change in topic and content. See *Schedule of Classes* for specific topics.

M760 RECREATION (RECR)

2105. Introduction to Recreation and Parks. (3). Nature of recreation experience and its importance to the individual; influence of leisure on society; public, voluntary, military and commercial delivery systems for recreation and park services.

2205. Youth Service Organization. (2). Introduction to agencies servicing leisure time needs of children and adults. Emphasis on YMCA, YWCA, CYO, JCC, BSA, and GSA. Objectives, organization, program, and membership of principal national youth agencies.

3102. Introduction to Therapeutic Recreation. (3). Theoretical and philosophical foundations of therapeutic recreation, history of therapeutic recreation, concepts of illness and disability, role of the professional recreation therapist, and survey of therapeutic recreation services and settings.

3103. Outdoor Education. (3). (3705). Philosophy, modern trends, park interpretation, administration, program content and methods of leadership in outdoor education activities. Opportunities for field trips to practice leadership skills.

3104. Public, Private and Commercial Recreation Services. (3). Public, private and commercial recreation agencies; evaluation of overall range of recreation units; critical study of fundamental differences among these delivery systems.

3105. Philosophy and Principles of Recreation. (3). Work, leisure, play, and recreation; attention to sound principles of recreation. [W].

3202. Techniques in Therapeutic Recreation. (3). Basic therapeutic recreation methods emphasizing leadership and intervention techniques, assessment of client needs, activity analysis, program planning, and evaluative procedures. PREREQUISITES: BIOL 1731, 1732.

3203. Resource Management in Recreation. (3). (3405). Management, operation and maintenance of areas and facilities within field of recreation and parks; identification, acquisition, allocation, development and management of land and water resources through environmentally sound techniques.

3204. Management of Recreation Services. (3). Inter-personal skills necessary in administration and

management of recreation personnel; critical areas of manager/employee relationships; legal basis and legal aspects of recreation and park service. Offered alternate years only.

3205. Park and Recreation Facilities. (3). Planning, development, and maintenance of parks and recreation facilities. Includes inspection, comprehensive recreation surveys, and planning a layout.

3305. Program Planning in Recreation. (3). Program fields in relation to programming principles, planning objectives, structural organization, purposes and values of types of activities, programs for special groups, and program evaluation.

3605. Outdoor Recreation. (3). Organization and administration of programs and activities in large park areas and forests. Outings, campfire programs, picnics, hiking, outdoor cookery, trailing, climbing, class and field activity.

3905. Recreation for Special Populations. (3). Population segments of American society that are considered physically, socially, mentally and emotionally abnormal; emphasis on examining recreational needs of special populations.

4001. Park Visitor Management I: Introduction. (2). Evolution of park visitor management theory, marketing and programming for today's park and recreation areas; use of information as management tool.

4002. Park Visitor Management II: Interpretive Services (2). Interpretive programs as means of enhancing visitor enjoyment and education while aiding park managers in mission of protecting park resources.

4003. Park Visitor Management III: Backcountry Techniques. (2). Theories and techniques of backcountry visitor outdoor recreation skills, development of backcountry management plans, and current trends in recreation area management.

4004. Park Visitor Management IV: Hazards, Search and Rescue. (2). Theories and techniques of hazard management, legal and ethical implications, visitor search and rescue.

4102. Leisure Education for Recreation Therapy. (3). Leisure education as applied in recreation therapy settings. Analysis of groups served, programs offered, interagency coordination and general trends in the profession today.

4103. Camp Administration, Counseling and Programming. (3). (3505). History, administration, organization and operation of organized camping programs; emphasis on program planning, camp administration, staff selection, training and camp counseling techniques as practiced today.

4104. Leadership Seminar in Recreation. (3). (3805). Dynamics of leadership; theories, principles and practices of leadership; research in leadership, issues and problems of working with individuals and groups.

4105. Recreational Leadership. (3). Development of skills and techniques necessary for successful leadership in recreation and park programs.

4203. Aquatic Administration. (2). Administration and management of aquatic programs; emphasizes organization and direction of aquatic programs in recreational and educational environments.

4305. Field Problems in Recreation. (1-6). Selected problems in areas of recreation and parks through individual and group field experience. PREREQUISITE: permission of instructor.

4405-6405. Organization and Administration of Recreation. (3). Community organization, its philosophy, foundation and principles. Selected administrative practices that relate to successful recreational organization and administration.

4505. Recreation Planning and Technological Support Systems. (3). Process and products of urban recreation planning; focus on basic concepts, measures, methodology, the park and recreation plan and use of computer. *Two lecture, two laboratory hours per week. [C].*

4605. Internship in Recreation and Parks. (3-9). Professional field experience; opportunity to relate theory to practical experience. May be repeated for maximum of 18 hours. PREREQUISITE: Consent of instructor. (S/U).

4705-14-6705-14. Workshop in Recreation and Parks. (1-6). Selected phases of recreation, parks or leisure studies. In-depth study of areas of interest and

need for persons in recreation and parks or related fields. May be repeated with a change in topic.

4905-14-6905-14. Special Topics In Recreation, Parks, and Leisure Studies. (1-3). Current topics in recreation, parks, and leisure studies. May be repeated with change in topic and content. See *Schedule of Classes* for specific topic.

HOME ECONOMICS

PROFESSOR DIXIE R. CRASE, Chair
Room 404, Manning Hall

M770 HOME ECONOMICS (HMEC)

1100. Home Economics as a Profession. (1). Scope of Home Economics, educational preparation, professional orientation and research pertinent to the field. (S/U). PREREQUISITE: Home economics major.

1101. Personal Development and Human Relations. (3). Individual and group adjustment, influences contributing to successful marriage and family life.

1105. Clothing Selection and Construction. (3). Standards in selecting and purchasing; construction of cotton garments to meet individual needs. *One lecture, four laboratory hours per week.*

2004. Technical Skills for Home Furnishings. (3). Students interested in housing, home furnishing and related areas focus on varied program of technical skills involving quick-sketch problems, freehand floorplans, and collages. For home economics majors who lack skills necessary to demonstrate concepts of depicting home furnishing interiors.

2005. Introduction to Fashion Merchandising. (3). Introduction to the types of enterprises, activities, operations, interrelationships, and practices in fashion industry. Emphasis on merchandising terminology and techniques.

2101. The Family In Global Perspective. (3). (Same as SOCI 2101). Introduction to family as a primary, global, social institution. Contributions sociology, anthropology, and home economics have made to understanding how and why family systems vary worldwide and common bonds and problems facing families in modern societies. [G].

2102. Food Selection and Preparation. (3). Principles underlying selection and preparation of foods with introduction to planning and serving of meals. Open to freshmen. *One lecture, four laboratory hours per week.*

2104. Home Furnishings and Related Arts. (3). Elements and principles of design applied to selection and arrangement of house and its furnishings.

2106. Visual Merchandising. (3). Theory and practice in visual merchandising (display); especially retail interior and window display techniques, display creation, planning promotions, and determining budgets.

2202. Nutrition. (3). Nutritive value of food, factors influencing body food requirement and health.

2205. Clothing Construction. (3). Fundamental principles of clothing construction, fitting and handling wool, silk, and synthetic fabrics. *One lecture, four laboratory hours per week.* PREREQUISITE: HMEC 1105.

3100. Consumer Education. (2). (3405). Examination of consumer problems in today's market place; emphasis on decision making, consumer rights and responsibilities and consumer information sources.

3106. Professional Development Seminar. (3). Professional orientation and development of effective communication and leadership skills for the home economics major. [W].

3204. Housing and Equipment. (3). (4203). Housing as it relates to conditions of family living. Principles underlying construction, use, and care of household equipment.

3206. Merchandising Systems. (3). Analysis of formulas used to plan and control the flow of merchandise through the use of both computer and manual systems. [C].

3301. Child Development and Learning Theory. (2). (Same as EDUC 3301). Principles of human development and learning processes as they relate to infancy, early and middle childhood years.

3302. Meal Preparation and Table Service. (3). Nutrition fundamentals in individual and family diets, meal planning, marketing and table service for various occasions. *One lecture, four laboratory hours per week.* PREREQUISITE: HMEC 2102.

3401. Parenthood Education. (3). Parental role, parent-child relationship and factors that influence parenthood.

3602. Institutional Management and Equipment. (3). Observation and practice in handling problems of organization and management of quantity food service. Computer application to managerial tasks in food service. PREREQUISITE: HMEC 2104 or permission of instructor.

4002. Advanced Nutrition. (3). (4402). In-depth study of nutrients and body utilization and discussion of current issues in nutrition. PREREQUISITES: HMEC 2202, CHEM 1111, 1112.

4101-6101. Nursery School Curriculum. (3). Application of child development principles to program planning; infancy through four years of age.

4102. Diet Therapy. (3). Dietary problems applicable to prevention and treatment of disease in which therapeutic diets are of major importance. Computer applications in diet modifications. PREREQUISITES: BIOL 1731, HMEC 2202, 4002; or permission of instructor.

4103. Family Economics (2). Management of family resources as they relate to satisfying home and family life. Includes problems in consumer goods and services.

4200. Readings in Home Economics. (1-3). For senior home economics majors; in-depth reading or research in area of specialization. PREREQUISITE: senior home economics majors only.

001 Child Development and Family Relations (1-3).

002 Foods and Nutrition. (1-3).

003 Family Economics and Consumer Education (1-3).

004 Housing and Home Furnishings. (1-3).

005 Clothing and Textiles. (1-3).

006 Fashion Merchandising. (1-3).

007 Home Economics Education. (1-3).

4204-6204. Furnishings Problems and Presentations. (3). Problems in planning, coordinating, and purchasing of home furnishings. *One lecture, three laboratory hours per week.* PREREQUISITE: HMEC 2004, 4304.

4205. Behavioral Aspects of Clothing. (3). Interdisciplinary study of clothing and appearance; concepts, methodologies, and applications of behavioral science to clothing.

4300-6300. Family Resource Management. (3). Investigates values, goals, and human and material resources necessary for individuals and families to take informed management decisions throughout the span.

301. Nursery School Practicum. (3). Participation in and direction of various nursery school activities. *One conference, five laboratory hours per week.* PREREQUISITE: HMEC 3301. (S/U).

304-6304. Trends in Housing and Home Furnishings. (3). (3104). Major trends and influences on contemporary residential furnishings as these affect home furnishings merchandising. PREREQUISITE: HMEC 2104.

305-6305. Trade Construction of Clothing. (3). Clothing construction based upon industrial trade methods and techniques, in logical sequence, in garment construction. PREREQUISITE: HMEC 2205.

315. Internship in Clothing Services. (3). For teachers in areas of Occupational Clothing Services. Emphasis on utilizing knowledge and skills in clothing area in industrial setting. PREREQUISITE: All Occupational major subject matter courses must be completed previous to internship. (S/U).

383-6383. Materials and Methods in Secondary Home Economics. (3). (Same as SCED 3383). Methods in high school subjects includes: objectives, content, and grade placement of subjects; tools of instruction; organization of courses; and teaching procedures and practices.

4393-6393. Occupational Education In Home Economics. (3). (3393). History, philosophy, and organization of Home Economics Occupational Education; emphasis on instructional strategies and evaluation through classroom and on-site participation. PREREQUISITE: HMEC 3383.

4405-6405. Textiles. (3). (3305). Selection, use and care of textiles related to properties of fibers, yarn structures, fabric construction, and finishes. Morphology and chemistry of fibers, finishes, dyes, fabric maintenance and procedure involved in fiber, yarn, and fabric identification.

4502-6502. Quantity Cookery and Purchasing. (3). Principles of procuring, storing, producing and serving foods in volume. Planned work experience in selected quantity food operations. PREREQUISITES: HMEC 3302, 3602.

4504-6504. Selection and Use of Textiles for Home Interiors. (3). Guides in selection, use and care of textiles for household interiors.

4505-6505. Tailoring. (3). Selection and construction of tailored wool garments, using various tailoring techniques. PREREQUISITE: HMEC 1105 and permission of instructor.

4600. Seminar in Home Furnishing and Fashion Merchandising. (6). Concentrated study of factors influencing fashion and home furnishings merchandising; patterns of production, distribution, buying and promotion. PREREQUISITE: All major subject matter courses must be completed before the professional semester. Approved application for admission preceding semester of enrollment. COREQUISITE: Fashion concentration - HMEC 4705; Home Furnishings concentration - HMEC 4804.

4602-6602. Community Nutrition. (3). Nutritional problems and practices of various ethnic, age and socio-economic groups. Community and agencies concerned with meeting these needs. PREREQUISITE: HMEC 2202 or permission of instructor.

4702-6702. Nutrition Practicum. (3). Supervised field experience in the area of food service administration and/or community nutrition.

001 Food Production Practicum. (4302).

002 Catering. (4202).

003 Community Nutrition.

4705. Fashion Merchandising Internship. (3,6). Full-time work experience in fashion merchandising in approved business establishments. Majors may not enroll for more than total of 12 semester hours during professional semester. COREQUISITE: HMEC 4600. (S/U).

4802-6802. Experimental Foods. (3). Principles underlying experimental approach to study of chemistry, composition, structure, and properties of foods; effects of various ingredients in commonly prepared foods. *One lecture, four laboratory hours per week.* PREREQUISITES: HMEC 2102, CHEM 1111, 3311.

4804. Home Furnishings Merchandising Internship. (3,6). Full-time work experience in home furnishings merchandising in approved business establishments. Majors may not enroll for more than total of 12 semester hours during professional semester. COREQUISITE: HMEC 4600. (S/U).

4900-6900. Home Economics Study Tour. (1-3). On-the-scene knowledge about specific academic areas of specialization within home economics. PREREQUISITE: permission of instructor. Maximum of 6 credit hours for degree program.

001 Child Development and Family Relations. (1-3).

002 Foods and Nutrition. (1-3).

003 Family Economics and Consumer Education. (1-3).

004 Housing and Home Furnishings. (1-3).

005 Clothing and Textiles. (1-3).

006 Fashion Merchandising. (1-3).

4920-29-6920-29. Special Topics in Home Economics. (1-3). Lectures and conferences covering selected areas of current interest. See *Schedule of Classes* for topics. May be repeated; credit applicable to degree is limited.

4940-49-6940-49. Workshop in Home Economics. (1-3). Group study related to specific phases of home economics. See *Schedule of Classes* for topic. May be repeated.

M773 MARKETING EDUCATION (MKED)

4010-6010. Cooperative Occupational Education. (3). (VTED, DTED 3010). Study of occupational education programs which use work experience coordinated with related in-school instruction; career preparation in marketing, office, industry, home economics, health and other fields of employment-technical education to general education; trends in vocational-technical education.

4611-6611. Principles and Philosophy of Vocational Education. (3). (VTED, DTED). History, philosophy, principles and objectives of vocational education; curriculum problems; contribution of vocational-technical education to general education; trends in vocational-technical education.

4630-6630. Materials and Methods in Marketing Education. (3). Instructional materials and techniques used in high school and post-high school marketing and marketing education classes (Fall semester only).

4641-6641. Techniques of Coordination of Cooperative Occupational Education. (3). (VTED, DTED). Selecting training agencies; developing of analyses; selecting and briefing training supervisor; selecting and working with advisory committees; utilizing other community resources. PREREQUISITE: MKED 4010 or consent of instructor.

4651. Basic Problems in Marketing Education. (1-3). Independent study of current trends and issues related to marketing education.

4680-6680. Development and Supervision of Vocational Student Organizations. (3). (VTED 4130, DTED 4680). Aims and objectives of vocational student organizations and their value in occupational preparation; their development, curricular integration, operation and evaluation.

4690-99-6690-99. Workshop in Marketing Education. (1-9). Group study of selected phases of marketing education program; to assist both in-service and prospective marketing education teacher-coordinators in improvement of teaching-learning processes contained in program operation. May be repeated when topic varies.

4700-6700. Marketing Education Study Tour. (1-3). On-the-scene experience with specific areas of marketing education instruction. May be repeated with permission of major advisor. PREREQUISITE: permission of instructor.

SPECIAL EDUCATION

PROFESSOR WILSON L. DIETRICH,

Chair

Room 100, The Special Education Building

M791 SPECIAL EDUCATION (SPED)

2000. Introduction to Exceptional Children. (3). (SPER). Overview of special education, including historical perspective of the field, characteristics and education of children and youth in each area of exceptionality.

3002. Independent Study in Special Education. (1-6). (SPER). Opportunity for self-directed study and/or research under supervision. PREREQUISITE: consent of department.

3012. Methods, Materials, and Curriculum for Mildly Handicapped Learners. (3). (SPER). Curriculum, methods and materials applicable to special educational needs of mildly handicapped children who are mentally retarded, learning disabled and/or emotionally disturbed in primary, intermediate and secondary levels; emphasis on applied programming techniques and implementation of remedial procedures in special education settings. CO/PREREQUISITES: *

3013. Practicum in Application of Special Education Methods and Materials I. (3). (SPER). Planning and implementation of special education methods and materials with mildly handicapped learners. CO/PREREQUISITES: * (S/U).

3014. Assessment of Exceptional Persons. (3). (SPER). Tests and measurements used with exceptional persons, including psychological, social and other assessment instruments used in educational and vocational evaluation of exceptional persons. CO/PREREQUISITES: *

3015. Behavior Management for Exceptional Students. (3). (SPER). Advanced strategies for managing social behaviors of moderately and severely handicapped learners. Techniques for eliminating maladaptive behaviors, managing aggressive and antisocial students, and teaching appropriate social skills. CO/PREREQUISITES: *

*SPED 3012, 3013, 3014, and 3015 must be taken as corequisites. The prerequisites for this sequence are SPED 2000 and ELED 3251, 4242.

3201. Introduction to Children with Emotional Problems. (4). (SPER). Historical developments and current practices in identification and treatment of children with emotional problems. Emphasis on educational phase of treatment, including characteristics of children, role of teacher, and curricula planning. Practicum with emotionally disturbed children included. PREREQUISITE: SPED 2000.

3401. Introduction to Children with Learning Disabilities. (4). (SPER). Historical developments and current practices in identification and treatment of children with learning disabilities. Emphasis on

diagnosis, management, and education of children with learning disabilities; and relationship of these concepts to academic failure. Practicum with learning disabled children included. PREREQUISITE: SPED 2000.

3501. Nature of Mental Retardation. (4). (SPER). Historical developments and current practices in identification and treatment of mentally retarded children. Multiplicity of implications of mental retardation as they relate to impairment in growth, maturation, and learning. Practicum with mentally retarded children included. PREREQUISITE: SPED 2000.

3516. Programming for Trainable Mentally Retarded Children. (3). (SPER). Diagnosis, classification, development of teaching materials and techniques, and interaction with trainable mentally retarded learners. PREREQUISITE: SPED 2000.

4002. Trends and Issues In Special Education. (3). (SPER). Current trends and issues such as mainstreaming, law and the handicapped citizen, working with parents of handicapped and knowledge of available services for handicapped and their families.

4012. Methods and Curricular Adoptions for Physically Impaired and Gifted Learners. (3). (SPER). Two-module course; respective methods and curricular adoptions needed by physically impaired and gifted learners in school settings. COREQUISITE: SPED 4013. PREREQUISITE: SPED 3012.

4013. Practicum in Application of Special Education Methods and Materials II. (3). (SPER). Planning and implementation of special education methods and materials; one-half semester with physically impaired; one-half semester with gifted learners. COREQUISITE: SPED 4012 PREREQUISITE: SPED 3012, 3013, 3014 and 3015. (S/U).

4101-10. Special Topics in Special Education. (1-3). Investigation in selected areas of special education and rehabilitation. Topics are varied and announced in *Schedule of Classes*.

4801-10. Workshop in Special Education. (1-9). For the professional in fields of special education and rehabilitation. Intensive study of current methodologies, research, issues and trends in various areas of exceptionality and disability. See *Schedule of Classes* for specific topic. May be repeated when topic varies.



The Herff College of Engineering

GERALD S. JAKUBOWSKI, *Interim Dean*
Room 201-D, Engineering Building

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
Civil Engineering	Civil Engineering*	(1) Construction Engineering (2) Environmental Engineering (3) Foundation Engineering (4) Structural Engineering (5) Transportation Engineering	Bachelor of Science in Civil Engineering (B.S.C.E.)
Electrical Engineering	Electrical Engineering*	(1) Computer Science (2) Electrophysics (3) Systems and Signals	Bachelor of Science in Electrical Engineering (B.S.E.E.)
Mechanical Engineering	Mechanical Engineering*	(1) Mechanical Systems & Design (2) Energy Systems (3) Biomedical Systems	Bachelor of Science in Mechanical Engineering (B.S.M.E.)
Engineering Technology	Architectural Technology†		Bachelor of Science in Engineering Technology (B.S.E.T.)
	Computer Systems Technology†		
	Electronics Technology†		
	Manufacturing Technology†		

*Note: Accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

†Note: Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)

PURPOSES

The college's function is to serve the educational and research needs of the industrial community, the metropolitan area, the state, and the nation. It accomplishes this function by providing: (1) undergraduate professional education in the principal fields of engineering, (2) undergraduate education in both technical and educational technology, (3) graduate education in all areas, (4) a program of continuing education for the engineering and technological practitioners of the area, (5) assistance in the solution of industrial problems through utilization of physical facilities and the professional talents of faculty and students, (6) a forum for the interchange of ideas and experiences among members of the industrial community through conferences, institutes and short courses and (7) an increase in the accumulation of knowledge in special fields of interest by a continuing program of study and research.

master's degree in Industrial and Systems Engineering and in Technical Education.

Advising

High school students, in planning for careers in one of the fields of engineering, should take advantage of preparatory courses. Since engineering is the application of mathematics and physical sciences to imaginative and useful systems, those courses should be emphasized in high school preparation. Courses are available at the university for those not fully prepared. Early enrollment in the summer terms offers excellent opportunity to remove any deficiencies that may exist.

Freshman students who choose to study in The Herff College of Engineering will be advised by an Engineering College counselor until a major has been selected; then they will be advised by a member of their major department. Because of one common core for engineering majors and another for engineering technology majors, internal changes of a student's major may be made efficiently without loss of academic credit.

Many students have found that the study of engineering is an excellent preparation for medical school. Those students electing this option should consult the advisor for the College of Engineering. Those courses in biology and chemistry which are necessary for the pre-med option may be used as electives in the engineering curricula. However, the student is advised to secure permission to do so before enrolling for the courses. The student should also see the university pre-professional advisor in the dean's office in the college of Arts and Sciences.

Students who desire to take courses offered by other institutions and receive transfer credit at Memphis State University, must secure the permission of the dean's office prior to enrolling in the courses.

DEGREE REQUIREMENTS

Degrees Offered

The Herff College of Engineering offers work leading to the following degrees: Bachelor of Science in Civil Engineering, Bachelor of Science in Electrical Engineering, Bachelor of Science in Mechanical Engineering, and Bachelor of Science in Engineering Technology.

The college also offers masters' degrees in these areas as well as a Ph.D. degree in Engineering. For more information about graduate programs, refer to the Graduate School Catalog.

The required curriculum, including elective specialties in each of the various undergraduate programs, is described in detail in the following pages. A minimum quality point average of 2.0 is required for graduation. A maximum of 2 semester hours of physical activity course credit may be applied to the degree.

University residence requirements are explained in detail in the *Graduation from the University* section. A student in the Herff College of Engineering must earn the 33 hours required by the university for residency as upper division hours in courses in the Herff College of Engineering.

The university computer literacy requirement is met by a combination of introductory and specialized courses, complemented by advanced classroom

ORGANIZATION

The Herff College of Engineering is organized into the Departments of Biomedical, Civil, Electrical, Mechanical Engineering and Engineering Technology. Except for biomedical engineering, each offers a choice of specialized four-year programs leading to baccalaureate degrees. Graduate master's or doctoral programs are offered in all of the engineering disciplines above. Students may also pursue the

assignments, in each major program of the College of Engineering. Specific requirements may be found in the degree descriptions which follow.

Bachelor of Science in Civil Engineering

The civil engineering program is built upon a foundation of mathematics, physical sciences, and mechanics with supporting courses in the humanities and social studies. The curriculum affords a detailed study of the fundamental principles which comprise the professional practice of civil engineering. Career opportunities include technical or administrative positions in the areas of planning, design, construction, and maintenance of all types of public and private civil engineering projects.

To qualify for the degree of Bachelor of Science in Civil Engineering, a student must satisfy general university and college requirements, have a grade of "C" or higher in all civil engineering courses, and complete the 140 semester hour course sequence outlined below. For credits transferred from another institution, only those civil engineering course grades of "C" or higher may be applied toward the degree.

The degree program in civil engineering includes a series of engineering science and professional courses taught at the upper division level. These courses are based on a background of communications, physical science, mathematics, and engineering science courses required during the freshman and sophomore years. All of the courses required during the freshman and sophomore years are prerequisites to junior standing in the Civil Engineering Department. Students shall not enroll in any upper division courses in civil engineering prior to the semester in which they complete all of the lower division requirements. Exceptions to this policy can be made only by the department chair acting upon the recommendation of the student's advisor. Areas of specialization include environmental, structural, foundation, transportation, water resources, and construction engineering.

GENERAL EDUCATION REQUIREMENTS:

English Composition (6 hours): ENGL 1101-1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): ENGL 3603.

Mathematics (15 hours): MATH 1321, 2321, 2322, and 3391.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from pre-1500: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from post-1500: HIST 4260, PHIL 3411, PHIL 3512, POLS 3402, UNIV 3581. **NOTE:** Courses need to be selected that provide both breadth and depth and not be limited to a selection of unrelated introductory courses. In order to meet this requirement, the selection of these courses must be

approved by the department chair or the chair's designee.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** Students who completed one unit of American History in high school and who complete the B.S.C.E. degree requirements are exempt from this requirement.

Social Science (6 hours): ECON 2120 and one of the following: (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

Natural Science (16 hours): CHEM 1121, 1122, 1131, 1132; PHYS 2511, 2512.

Fitness and Wellness: (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (6 hours): CIVL 1107 and CIVL 3101.

CIVIL ENGINEERING

The Major: 63 semester hours in civil engineering courses including CIVL 1101, 1107, 2112, 2131, 3101, 3121 [C], 3131, 3135, 3161, 3180, 3181, 3182, 4111, 4135, 4141, 4151, 4199 [W], and 12 semester hours of civil engineering electives. A student may select courses from the following concentrations to satisfy the required 12 hours of civil engineering electives required for a Bachelor of Science degree in Civil Engineering. If a student desires to declare a concentration, a minimum of 9 hours from that concentration area is required. A minimum of 6 hours must be selected from the following design electives: CIVL 4131, 4136, 4152, 4163, 4164, 4180. Other electives include CIVL 3102 and 4190.

- a. **Environmental Engineering:** CIVL 4143, 4144, 4180, 4191
- b. **Foundation Engineering:** CIVL 3136, 4152, 4171, 4191
- c. **Structural Engineering:** CIVL 4131, 4136, 4152, 4191, 4122
- d. **Transportation Engineering:** CIVL 4162, 4163, 4164, 4191
- e. **Construction Engineering:** CIVL 4164, 4171, 4172, 4173, 4191

JUNIOR YEAR

CIVL 3101	3	CIVL 3131	3
CIVL 3121 [C]	3	CIVL 3135	3
CIVL 3180	3	CIVL 3161	3
MECH 3322	3	CIVL 3181	3
MECH 3311	3	CIVL 3182	1
Gen. Ed. (Hist/Phil) (pre-1500. See Note 1)	3	ENGL 3603 (See Note 1)	3
		MECH 3325	1
	18		17

SENIOR YEAR

CIVL 4135	3	CIVL 4111	3
CIVL 4141	4	CIVL 4199 [W]	3
CIVL 4151	4	CIVL Elective (See Note 2)	6
CIVL Elective (See Note 2)	6	Gen. Ed. (Hist/Phil) (post-1500. See Note 1)	3
	17		15

NOTE 1: In addition to meeting the university General Education requirements, this course must be used to fulfill part of the engineering humanities and social sciences requirement. The combination must include a sequence of courses that reflects both breadth and depth in a particular area. Chairman's approval required.

NOTE 2: Upper division course in civil engineering; advisor's approval required.

Bachelor of Science in Electrical Engineering

Students enrolled in electrical engineering are offered a curriculum which is designed to provide a thorough background and understanding of the theoretical and physical principles of electric and magnetic phenomena. The concepts and techniques of mathematics and physics are applied to a wide variety of applications in electrical engineering.

Laboratory facilities are available for a wide variety of instructional and research activities. Significant laboratory activity is required in the curriculum.

Career opportunities include positions in development and design, research, sales, management, manufacturing, and construction. Some of the technical areas of opportunity are related to computer applications, communications systems, power generation and distribution systems, microwave and antenna systems, automatic control systems, and general instrumentation. An undergraduate student, with the approval of the department chairman, may select some electives that satisfy the course entrance requirements for medical school.

The Department of Electrical Engineering offers a Master of Science degree for electrical engineers who desire advanced study in electro-optical systems, automatic control systems, engineering computer systems, and communications and propagation systems. The department also offers a concentration in Electrical Engineering for students pursuing the interdepartmental Doctor of Philosophy degree.

The minimum requirements for the degree of Bachelor of Science in Electrical Engineering are given below. The student must satisfy general university and college requirements. In addition, an average grade

FRESHMAN YEAR

ENGL 1101	3	ENGL 1102	3
MATH 1321	4	MATH 2321	4
CIVL 1101	3	CIVL 1107	3
MECH 1308	2	PHYS 2511	4
CHEM 1121, 1131	4	CHEM 1122, 1132	4
HPER 1100	2		
	18		18

SOPHOMORE YEAR

ENGL 2201	3	Gen. Ed. (Fine Arts)	3
MATH 2322	4	MATH 3391	3
PHYS 2512	4	ELEC 2201	3
CIVL 2131	3	MECH 2332	3
ECON 2120	3	CIVL 2112	3
Physical Activity	2	Gen. Ed. (Social Science) (See Note 1)	3
	19		18

of C must be maintained in all undergraduate electrical engineering course work. No transfer credit with a grade less than C may be used to satisfy a requirement for the Bachelor of Science in Electrical Engineering.

Neither admission by Memphis State University, nor completion of the minimum requirements guarantees admission to any specific electrical engineering course. Resource limitations may dictate class enrollment selection based on ranking by academic proficiency with possible allowances for graduating seniors. Transfer students should seek advice from the Electrical Engineering Department prior to seeking university admission.

GENERAL EDUCATION REQUIREMENTS:

English Composition (6 hours): ENGL 1101-1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): ENGL 3603.

Mathematics (18 hours): MATH 1321, 2321, 2322, 3391, and one upper division MATH course selected with advisor's approval.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 4260, PHIL 3411, PHIL 3512, POLS 3402, UNIV 3581. **NOTE:** Courses need to be selected that provide both breadth and depth and not be limited to a selection of unrelated introductory courses. In order to meet this requirement, the selection of these courses must be approved by the department chair or the chair's designee.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** Students who completed one unit of American History in high school and who complete the B.S.E.E. degree requirements are exempt from this requirement.

Social Science (6 hours): ECON 2110 and one of the following: ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

Natural Science (16 hours): CHEM 1121, CHEM 1131; PHYS 2511, and PHYS 2512, and one of the following: BIOL 1111, 1112, 1731, CHEM 1122 and 1132, or GEOL 1101.

Fitness and Wellness: (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (6 hours): ELEC 1206 and ELEC 1207.

ELECTRICAL ENGINEERING

The Major: 55 semester hours of electrical engineering courses including ELEC 1206, 1207, 2201, 2203, 2222, 3201, 3202, 3211, 3212, 3213, 3221, 3240 [C], 4201 [C], 4203, 4231 and 4280 [W]. The remaining semester hours of electrical engineering courses may be selected for concentration in one of the areas listed below. The program also includes 4 semester hours of technical electives which students may utilize to broaden their base of knowledge and for concentration in one of the areas listed below. Nine semester hours are required for a concentration. The areas of concentration are as follows:

- a. **Computer Science:** ELEC 3220, 4230, 4232, 4270, 4271, and 4272.
- b. **Electrophysics:** ELEC 4212, 4213, 4223, 4240, 4241, 4242, and 4243.
- c. **Systems and Signals:** ELEC 4202, 4204, 4221, 4223, 4230, 4232, 4233, 4234, 4251, 4252, 4253, 4255, and 4261.

NOTE: Projects I or II, ELEC 4991 or 4992 can be taken for up to 6 semester hours credit in any of the areas of concentration.

FRESHMAN YEAR		
ENGL 1101	3	ENGL 1102
MATH 1321	4	MATH 2321
MECH 1308	2	ELEC 1207
ELEC 1206	3	PHYS 2511
CHEM 1121, 1131	4	Gen. Ed.
HPER 1100	2	(Natural Science)
	18	18

SOPHOMORE YEAR		
ENGL 2201	3	Gen. Ed. (Fine Arts)
MATH 2322	4	MATH 3391
PHYS 2512	4	ELEC 2201, 2203
CIVL 2131	3	MECH 2332
ELEC 2222	4	ECON 2110
		Physical Activity
	18	18

JUNIOR YEAR		
ELEC 3201	4	ELEC 3202
ELEC 3211, 3213	4	ELEC 3212
ELEC 3221	3	ELEC Elective
ELEC 3240 [C]	3	(See Note 3)
MATH Elective (See Note 5)	3	ENGL 3603
	3	(See Note 1)
	3	Gen. Ed. (Social Science) (See Note 1)
	17	16

SENIOR YEAR		
ELEC 4231 (See Note 4)	3	ELEC 4280 [W]
ELEC 4201 [C], 4203 (See Note 3)	4	MECH 3311 Technical Elective
ELEC Elective (See Note 3)	7	(See Note 2)
Gen. Ed. (Hist/Phil) (pre-1500. See Note 1)	3	Gen. Ed. (Hist/Phil) (post-1500. See Note 1)
	17	13

NOTE 1: In addition to meeting the university General Education requirements, this course must be used to fulfill part of the engineering humanities and social sciences requirement. The combination must include a sequence of courses that reflects both breadth and depth in a particular area. Chairman's or designee's approval required.

NOTE 2: Upper division courses in engineering, mathematics, physics. Advisor's approval required.

NOTE 3: Upper division courses in electrical engineering. Courses selected must include sufficient design content. Advisor's approval required.

NOTE 4: Substitution of ELEC 4230 or 4232 may be made with advisor's approval.

NOTE 5: Upper division courses in mathematics. Advisor's approval required.

Bachelor of Science in Mechanical Engineering

Mechanical engineering is a broad field, and consequently students are offered a balanced curriculum designed to provide a strong foundation in mathematics, physical sciences and the engineering sciences. Moreover, they study humanities and social sciences to understand more fully the engineer's relationship and responsibilities to society. Finally, mechanical engineers cultivate, through advanced courses in engineering design and synthesis, the ability to apply this knowledge to the analysis and solution of significant engineering problems.

Because of the diverse nature of this work, the mechanical engineer must have a basic knowledge of chemistry, physics, mathematics and the classical disciplines of mechanical engineering, thermal sciences, mechanical sciences, materials sciences and modern techniques of engineering analysis, design and optimization. This diverse background uniquely equips the mechanical engineer to work on a variety of challenging problems, including land and marine vehicles, aircraft and spacecraft, air conditioning systems, power plants, machines, and a host of other devices.

To qualify for the degree of Bachelor of Science in Mechanical Engineering, the student must satisfy the following general university and college requirements, and obtain a C or better in all mechanical engineering courses used toward graduation.

GENERAL EDUCATION REQUIREMENTS:

English Composition (6 hours): ENGL 1101-1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): ENGL 3603.

Mathematics (15 hours): MATH 1321, 2321, 2322, and 3391.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500**: CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500**: HIST 4260, PHIL 3411, PHIL 3512, POLS 3402, UNIV 3581. **NOTE:** Courses need to be selected that provide both breadth and depth and not be limited to a selection of unrelated introductory courses. In order to meet this requirement, the selection of these courses must be approved by the department chair or the chair's designee.

American Heritage (6 hours): HIST 2601 or 2602; plus one other course from the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422. **NOTE:** Students who completed one unit of American History in high school and who complete the B.S.M.E. degree requirements are exempt from this requirement.

Social Science (6 hours): ECON 2110 and one of the following: ANTH 1100, ANTH 1200, CJUS 1100, CJUS 2110, ECON 2120, GEOG 1301, GEOG 1401, POLS 1100, POLS 2301, POLS 2501, PSYC 1101, PSYC 2201, SOCI 1111, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

Natural Science (16 hours): CHEM 1121, CHEM 1131, PHYS 2511, and PHYS 2512, and one of the following: BIOL 1111, 1112, 1731, CHEM 1122 and 1132, or GEOL 1101.

Fitness and Wellness: (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002; THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 2203, 3000.

Computation Intensive [C] (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive [W] (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative [I] (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (6 hours): MECH 1307 and MECH 3341.

MECHANICAL ENGINEERING

The Major: 58 semester hours of mechanical engineering courses including 7 semester hours selected from one of the concentration areas listed below. Within each concentration area the first course listed must be taken as the Mechanical Design Elective. A minimum of 10 semester hours in the concentration area is required if it is to be designated on the transcript.

- a. **Mechanical Systems and Design:** MECH 4320, 4323*, 4324, 4325, 4330, 4340, 4345, 4346, 4360, 4371.
- b. **Energy Systems:** MECH 4309, 4313, 4314*, 4315, 4331, 4333, 4337, 4369.
- c. **Biomedical Systems:** MECH 4326, 4350*.

* indicates 4 credit hour course

FRESHMAN YEAR		
ENGL 1101	3	ENGL 1102
MATH 1321	4	MATH 2321
MECH 1306	1	MECH 1307
MECH 1308	2	PHYS 2511
CHEM 1111	4	CHEM 1112
HPER 1100	2	
	16	18

SOPHOMORE YEAR		
ENGL 2201	3	Gen. Ed. (Fine Arts)
MATH 2322	4	MATH 3391
PHYS 2512	4	MECH 2323
CIVL 2131	3	ELEC 2201
Gen. Ed. (Social Science) (See Note 1)	3	ELEC 2203
	3	MECH 3320
		Physical Activity
	17	18

JUNIOR YEAR		
MECH 3341 [C]	3	MECH 3312
MECH 3311	3	MECH 3321
MECH 3305	3	MECH 3323
MECH 3306	1	MECH 3331
MECH 3322	3	MECH 3335
MECH 3325	1	ECON 2110
ENGL 3603 (See Note 1)	3	
	17	16

SENIOR YEAR		
MECH 4311	3	MECH 4300
MECH 4322	3	MECH 4312
MECH 4344	3	MECH Des. Elective
		(See Notes 2 & 3)
MECH Elective (See Note 2)	3	MECH Elective
CIVL 4111	3	(See Note 3)
Gen. Ed. (Hist/Phil) (pre-1500. See Note 1)	3	Technical Elective
		(See Note 4)
		MECH 4335
		Gen. Ed. (Hist/Phil)
		(post-1500. See Note 1)
	18	18

NOTE 1: In addition to meeting the university General Education requirements, this course must be used to fulfill part of the engineering humanities and social sciences requirement. The combination must include a sequence of courses that reflects both breadth and depth in a particular area. Approval of department chair or designee is required.

NOTE 2: 7 semester hours of upper division mechanical engineering courses to gain depth in one of the following concentration areas: Energy Systems, Mechanical Systems and Design, or Biomedical Systems.

NOTE 3: A 4 semester hour senior design course selected from the courses offered in the concentration area chosen (Note 2).

NOTE 4: An upper division course in engineering, mathematics, physics, chemistry, etc., in support of the chosen concentration area. Advisor's approval required.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy (6 hours): TECH 1010 or TECH 1210 and TECH 2010 or TECH 3233.

Major: Completion of requirements for one of the following majors.

ARCHITECTURAL TECHNOLOGY

Architectural Technology is that branch of Engineering Technology that concerns itself with those phases of architectural and engineering design as related to buildings. The purpose of the program is to teach design principles and drafting techniques in preparation for tasks that are now required of the architect and the engineer. The course offerings are engineering oriented with emphasis on architectural practices and principles.

NOTE: Substitutions must be approved by the program coordinator.

FRESHMAN YEAR

ENGL 1101	3	ART 1101	3
MATH 1213	4	CHEM 1101	4
TECH 1010	3	ENGL 1102	3
TECH 1411	1	MATH 1321	4
TECH 1521	3	TECH 1561	3
TECH 1555	3		17
			17

SOPHOMORE YEAR

ENGL 2201	3	COMM 2381	3
PHYS 2111	4	HPER 1100	2
TECH 2555	4	PHYS 2112	4
TECH 3044	4	TECH 2010	3
TECH 3400	3	TECH 2451	3
		TECH 3401	3
	18		18

JUNIOR YEAR

ENGL 3601	3	ANTH 1200	3
HIST 2601	3	HIST 2602	3
SOCI 1111	3	Physical Activity	2
TECH 2556	3	TECH 3472	3
TECH 3471	3	TECH 3520	4
TECH 3561	3	TECH 3525	3
	18		18

SENIOR YEAR

TECH 3408	3	HIST 1301	3
TECH 3531	3	PHIL 1102	3
TECH 3691	3	TECH 3409	1
TECH 4515	4	TECH 4615	5
TECH 4530	3	TECH 4944 [W]	3
	16		15

COMPUTER SYSTEMS TECHNOLOGY

This area of study is designed to prepare for positions that require a knowledge of computer architecture and programming and the application of computers in various industries. Electives may be selected to provide a strong background in one or more areas of study.

FRESHMAN YEAR		
CHEM 1101	4 ENGL 1102	3
ENGL 1101	3 COMM 2381	3
HPER 1100	2 MATH 1321	4
MATH 1213	4 *Physical Activity	2
TECH 1411	1 TECH 1210	3
TECH 1521	3 TECH 1811	3
	17	18

SOPHOMORE YEAR		
ENGL 2201	3 PHYS 2112	4
PHYS 2111	4 TECH 2010	3
TECH 2251	4 TECH 2230	4
TECH 2821	3 TECH 2261	4
TECH 3044 [C]	4 TECH 2831	3
	18	18

JUNIOR YEAR		
ENGL 3601	3 *General Education	3
*General Education	3 *General Education	3
*General Education	3 HIST 2602	3
HIST 2601	3 TECH 3233	4
TECH 3232	3 TECH 3281	4
	15	17

SENIOR YEAR		
TECH 3251	4 *General Education	3
TECH 4234	4 TECH 4235	4
TECH 4261	4 TECH 4272	4
TECH 4381	3 TECH 4462 [C]	3
TECH 4474	3 TECH 4944 [W]	3
	18	17

* Must satisfy General Education degree requirements.

ELECTRONICS TECHNOLOGY

This area of study is designed for students interested in the application of electronics theory and techniques to the fields of communications, control instrumentation, and computer electronics. Requirements for this major are as follows:

FRESHMAN YEAR		
*General Education	3 CHEM 1101	4
ENGL 1101	3 ENGL 1102	3
MATH 1213	4 *Physical Activity	2
HPER 1100	2 MATH 1321	4
TECH 1521	3 TECH 1010 or 1210	3
TECH 1711	3 TECH 1411	1
	TECH 1811	3
18		20

SOPHOMORE YEAR		
ENGL 2201	3 COMM 2381	3
PHYS 2111	4 *General Education	3
TECH 2820	3 PHYS 2112	4
TECH 2821	3 TECH 2230	4
TECH 3044 [C]	4 TECH 2831	3
	17	17

JUNIOR YEAR		
*General Education	3 ENGL 3601	3
*General Education	3 *General Education	3
TECH 3232	3 TECH 3233	4
TECH 3440	3 TECH 3812	3
TECH 3811	3 TECH 3822	4
TECH 3821	3	17
	18	

SENIOR YEAR		
*General Education	3 *General Education	3
TECH 3841	3 TECH 4821	4
TECH 4234	4 TECH 4841	3
TECH 4381	3 TECH 4944 [W]	3
TECHNICAL ELECTIVE	3/4 TECHNICAL ELECTIVE	3/4
	16/17	16/17

*Must satisfy General Education degree requirements.

MANUFACTURING TECHNOLOGY

This program is for those individuals interested in careers in any of the manufacturing and service industries. Students will study a combination of technological and mechanical concepts coupled with quantitative management techniques that will enable them to plan, control, design, and manage complex computer controlled, automated industrial systems.

Graduates of the program will be prepared to work in a support role in the areas of manufacturing engineering, computer integrated manufacturing, quality assurance, plant engineering, and production management.

FRESHMAN YEAR		
ENGL 1101	3 *General Education	3
MATH 1213	4 ENGL 1102	3
TECH 1010	3 HPER 1100	2
TECH 1411	1 MATH 1321	4
TECH 1521	3 TECH 1611	3
TECH 1711	3 TECH 1811	3
	17	18

SOPHOMORE YEAR		
CHEM 1101	4 COMM 2381	3
ENGL 2201	3 *General Education	3
HIST 2601	3 HIST 2602	3
PHYS 2111	4 PHYS 2112	4
TECH 3044 [C]	4 Physical Activity	2
	17	18

JUNIOR YEAR		
ENGL 3601	3 *General Education	3
TECH 3350	3 *General Education	3
TECH 3400	3 TECH 3386	3
TECH 3408	3 TECH 3573	3
TECH 3421	3 TECH 3718	3
TECH 3440	3 TECH 4460	3
	18	18

SENIOR YEAR		
TECH 3409	1 TECH 4381	3
TECH 4462 [C]	3 TECH 4466	3
TECH 4464	3 TECH 4476	3
TECH 4472	3 TECH 4571	3
TECH 4474	3 TECH 4944 [W]	3
*General Education	3	15
	16	

*Must satisfy General Education degree requirements.

THE MINORS

Safety:

TECH 3386, 3525, 3531, 4470, 4950, 4381.

SURVEYING:

TECH 1521, 2451, 3451, 3591; GEOG 4510, 4511; PHYS 1811.

TECHNOLOGY:

TECH 1411, 1521, 1711, and 15 additional semester hours in technology courses, 9 semester hours of which must be from the upper division in one of the specific technology areas.

Engineering Course Descriptions

2112. Elements of Civil Engineering Design. (3). Topics from surveying and site development; emphasis on data analysis, presentation, and report writing. Computer applications include use of coordinate geometry, spread sheets, computer graphics, and word processing. Two lecture, three laboratory hours per week. PREREQUISITES: MECH 1308; CIVL 1101, 1107.

2131. Statics. (3). Analysis of two and three dimensional force systems; centroids and moments of inertia; friction. Three lecture hours per week. PREREQUISITE: MATH 2321. COREQUISITE: PHYS 2511.

3101. Computer Methods in Civil Engineering. (3). Civil engineering applications of fundamental methods of numerical analysis; advanced programming tech-

niques. Three lecture hours per week. PREREQUISITE: CIVL 1107. COREQUISITE: MATH 3391.

3102. Civil Engineering Analysis. (3). Probabilistic considerations in the design and analysis of civil engineering systems; integration of basic probability laws and statistical distributions with physical laws relating to civil engineering practice; treatment of uncertainty in the modeling of engineering systems. Three lecture hours per week. PREREQUISITE: CIVL 3101.

3121. Structural Analysis I. (3). Analysis of statically determinate structures; reactions, shear, and moment; truss analysis; deflections; influence lines and moving loads. Three lecture hours per week. PREREQUISITE: CIVL 2131. [C].

3131. Design of Steel Structures. (3). Current design concepts for structural steel members and their

CIVIL ENGINEERING

PROFESSOR OTTO J. HELWEG, P.E., Chair

Room 104A, Engineering Building

Q800 CIVIL ENGINEERING (CIVL)

1101. Elementary Surveying. (3). (2111). Theory of measurements, linear measurement, angles, bearings, use of transit, traversing, topographic surveys and mapping. Two lecture, three laboratory hours per week. COREQUISITE: MATH 1321.

1107. Civil Engineering Computation. (3). Fortran programming with applications to solution of Civil Engineering problems. COREQUISITE: MATH 1321.

connections *Three lecture hours per week*. PREREQ-USITES: CIVL 3121, MECH 3322.

3135. Properties of Concrete. (3). Properties of aggregates and portland cement; mix design; testing of plain concrete; properties of hardened concrete; quality control parameters. *Two lecture, three laboratory hours per week*. COREQUISITE: MECH 3322.

3136. Bituminous Materials Engineering. (3). Source, manufacture, processing, types, constituents, tests, chemical behavior, specifications and uses of bituminous materials and aggregates in pavement mix design and construction. *Two lecture, three laboratory hours per week*. COREQUISITE: MECH 3322.

3161. Transportation Systems Engineering. (3). (4161) Development and function of transportation systems; operational control and characteristics; system coordination, traffic flow and patterns. *Three lecture hours per week*. PREREQUISITES: CIVL 1107, MECH 2322, MATH 2322.

3180. Civil Engineering Hydraulics. (3). Basic principles of incompressible fluid mechanics with emphasis on hydrostatics, conservation of energy and momentum with application on engineering analysis of pipe networks, pumps, and open channel systems. *Three lecture hours per week*. PREREQUISITE: MECH 2332.

3181. Hydrology and Hydraulics. (3). (4148) Quantification of precipitation and runoff, reservoir and channel routing, groundwater, and design of drainage systems and open channels. *Three lecture hours per week*. PREREQUISITE: CIVL 3180.

3182. Hydrology and Hydraulics Laboratory. (1). Principles of fluid mechanics, open channel hydraulics, and collection of hydrologic data; fluid instrumentation, measurement techniques, data collection methods, and organization of written reports of experimental investigations. *Two laboratory hours per week*. COREQUISITE: CIVL 3181.

3322. Mechanics of Materials. (3). (Same as MECH 3322). Analysis of components subjected to tension, compression, bending moment, torque; combined loading, Mohr's stress circle; deflection of beams; simple treatment of column buckling. PREREQUISITE: CIVL 2131.

4111. Engineering Economics. (3). (3141). Application of economics and decision theory to engineering alternatives in planning, developing, constructing, and managing engineering projects. *Three lecture hours per week*.

4122. Structural Analysis II. (3). (3122). Analytical and numerical solutions for statically indeterminate structures. *Three lecture hours per week*. PREREQ-USITES: CIVL 3121, MECH 3322.

4131-6131. Intermediate Steel Design. (3). Design of plate girders and composite beams; moment connections; current code provisions. *Three lecture hours per week*. PREREQUISITES: CIVL 3131, 4122.

4135. Reinforced Concrete Design. (3). Strength analysis and design of reinforced concrete members; floor systems; current code provisions. *Three lecture hours per week*. PREREQUISITES: CIVL 3121, MECH 3322.

4136-6136. Intermediate Reinforced Concrete Design. (3). Design of two-way slab systems; column design including length effects; current code provisions. *Three lecture hours per week*. PREREQUISITES: CIVL 4122, 4135.

4141. Water and Wastewater Engineering. (4). Water and wastewater treatment fundamentals; water quality and treatment; physical, chemical, and biological treatment of wastewaters; design of water and wastewater treatment units; solid waste management; computer application in design. *Three lecture, three laboratory hours per week*. PREREQUISITE: MECH 3331.

4143-6143. Environmental Engineering I. (3). Basic physical chemical treatment concepts for water and wastewater with laboratory demonstration of laboratory studies. *Two lecture/ three laboratory hours per week*. COREQUISITE: CIVL 4141.

4144-6144. Environmental Engineering II. (3). Basic biological treatment concepts for wastewater with laboratory demonstration of unit operations as well as derivation of design data through laboratory studies. *Two lecture/ three laboratory hours per week*. COREQ-USITE: CIVL 4141.



4151. Soil Mechanics. (4). Properties of soil and rock, including identification and classification, hydraulic properties, consolidation characteristics, and stress deformation-strength relationships. *Three lecture, three laboratory hours per week*. PREREQUISITE: MECH 3322.

4152. Applied Soil Mechanics. (3). Subsurface exploration, foundation types, foundation construction, selection of foundation type and basis of design, earth retaining structures, and slope stability. *Three lecture hours per week*. PREREQUISITE: CIVL 4151.

4162-6162. Traffic Engineering. (4). Traits and behavior patterns of road users and their vehicles. Includes traffic signs and signals, pavement markings, hazard delineation, capacity, accidents and parking analysis. *Three lecture, three laboratory hours per week*. PREREQUISITE: CIVL 3161.

4163-6163. Airport Planning and Design. (3). Aeronautical demand and air traffic control; airport and runway configuration; capacity and delay analysis, geometric design of runways and taxiways; airport access and parking; ground movements and baggage movements. *Three lecture hours per week*. PREREQ-USITE: CIVL 3161.

4164-6164. Route Location and Design. (3). Elements of route location and design; emphasis on horizontal and vertical alignment, curvature, gradient and sight distance. *Two lecture, three laboratory hours per week*. PREREQUISITES: CIVL 1107, 3161.

4171. Construction Engineering I. (3). Planning, estimating, and bidding of heavy construction projects; development and use of scheduling algorithms for control of construction projects; linear programming and other optimization techniques and their application to resource allocation and bidding strategy. *Three lecture hours per week*. COREQUISITE: CIVL 4111.

4172. Construction Engineering II. (3). Application of construction engineering and management methods to estimate, bid, plan, and manage actual engineering construction project in safe, efficient manner. *Three lecture hours per week*. PREREQUISITE: CIVL 4171.

4173. Engineering Law. (3). Sources of law; forms of engineering organizations such as corporations, partnerships, and agencies; principles of contract law; application of construction law to the owner-engineer-contractor relationship, bidding, contracting, construction process, risk, disputes, and dispute resolution. *Three lecture hours per week*.

4180-6180. Intermediate Hydrology. (3). Current methods and techniques used in hydrologic analysis

and design of water resources projects; streamflow hydrograph analysis, groundwater hydrology, design flood determination and project feasibility. *Three lecture hours per week*. PREREQUISITE: CIVL 3181 or consent of instructor.

4190-6190. Water Resources Planning and Management. (3). Application of engineering principles to planning and design of multipurpose water resources projects, various physical components and appurtenances of water resources projects and economic, financial, and social feasibility of various purposes. *Three lecture hours per week*. PREREQUISITES: CIVL 3181, 4111 or consent of instructor.

4191. Civil Engineering Projects. (1-3). Independent investigation of a Civil Engineering problem in consultation with instructor. PREREQUISITE: consent of instructor.

4199. Civil Engineering Design. (3). Design of a civil engineering system. Establishment of design objectives and criteria; synthesis and computer assisted analysis of alternatives; selection of optimum system design; preparation of detailed system descriptions including design sketches and engineering drawings and reports. *Two lecture, two laboratory hours per week*. PREREQUISITES: ENGL 3601 and senior standing. [W].

4900-10. Special Topics in Civil Engineering. (1-3). Topics are varied and announced in the *Schedule of Classes*.

ELECTRICAL ENGINEERING

PROFESSOR CHARLES W. BRAY,
Interim Chair

Room 206B, Engineering Building

Q820 ELECTRICAL ENGINEERING (ELEC)

1206. Introduction to Electrical Engineering. (3). Engineering process from problem formulation to creative design; introduction to computers and computer ethics; use of text processors and spreadsheets.

1207. Electrical Engineering Computation. (3). Continuation of ELEC 1206 emphasizing structured solutions to electrical engineering problems through use of computers. PREREQUISITE: ELEC 1206.

2201. Circuit Analysis I. (3). Fundamental properties of electrical circuits; basic concepts and circuit elements; analysis methods and network theorems; sinusoidal steady-state response of single and three-phase circuits. COREQUISITE: ELEC 2203. PREREQUISITE: MATH 2322.

2203. Circuit Analysis Laboratory. (1). Introduction to utilization of meters, oscilloscopes, oscillators, power supplies and related test equipment in experimental verification of basic electric circuit theory. *Three laboratory hours per week.* COREQUISITE: ELEC 2201.

2222. Digital Circuit Design. (4). Review of number systems and base conversions. Analysis and design of digital circuits. Logic and sequential design. Introduction to microprocessors. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 1207.

3201. Circuit Analysis II. (4). Transient analysis of RLC networks. Complex frequency concepts. Ideal transformers and magnetic coupling. Two port networks and network synthesis. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 2201, MATH 3391.

3202. Transform Methods in Network Analysis. (3). Introduction to transform theory; Fourier Series; application of Fourier, Laplace and Z-transforms to solution of network problems. PREREQUISITE: ELEC 2201.

3211. Electronics I. (3). Solid state devices as elements of electronic circuits; linear models and linear operation of these devices emphasized. PREREQUISITES: ELEC 2201, 2203.

3212. Electronics II. (4). Utilization of devices in linear, non-linear, and switching modes of operation. Modeling and simulation of electronic circuits. *Three lecture, three laboratory hours per week.* PREREQUISITES: ELEC 2222, 3211, 3213.

3213. Electronics I Laboratory. (1). Emphasis on laboratory techniques in performance of basic electronic experiments. COREQUISITE: ELEC 3211.

3220. Engineering Computer Systems. (3). Structure and organization of digital computers and associated peripheral devices. Digital representation of data, basic instruction sets, instruction execution and addressing techniques. Subroutines and utility programs, systems programs, and other software oriented toward computer-controlled systems. PREREQUISITE: ELEC 2222.

3221. Matrix Computer Methods in Electrical Engineering. (3). Fundamentals of matrix theory; application of matrix theory and digital computer techniques to the solution of circuit problems. State equations and their application to the solution of systems of differential equations. COREQUISITE: ELEC 3201.

3240. Electromagnetic Field Theory I. (3). (4211). Maxwell's equations electrostatics, magnetostatics and time varying electromagnetic fields. PREREQUISITE: MATH 3391. [C].

4201. Energy Conversion. (3). Energy conversion by electromechanical processes, energy relations in magnetic systems, mathematical modeling of magnetic systems, transformers and electrical machines. PREREQUISITE: ELEC 2201. [C].

4202-6202. Electrical Power Systems. (3). Investigation of problems associated with transmission of electrical energy. Load-flow studies, and fault analysis by use of symmetrical components. PREREQUISITE: ELEC 3221.

4203. Energy Conversion Laboratory. (1). Fundamental properties associated with testing and utilization of direct current and of alternating current equipment such as motors, generators, alternators and transformers. COREQUISITE: ELEC 4201.

4204-6204. Power Distribution Systems. (3). Distribution of power from transmission systems to users; primary and secondary feeders; voltage regulation; distribution transformers; overhead, underground and network distribution system design; lightning phenomena and protective device coordination. PREREQUISITES: ELEC 4201, 4203.

4212-6212. Electromagnetic Field Theory II. (4). Plane waves. Steady state and transient solutions of transmission line equations. Steady state solutions to waveguide equations. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3240.

4213-6213. Antenna Theory and Design. (4). Theory of operation and design of antennas. Determination of

antenna radiation characteristics. Introduction to antenna array theory. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3240.

4221-6221. Electronics III. (4). Applications of analog and digital electronic circuits. Special purpose circuits and devices. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3212.

4222-6222. Digital Logic and Computer Design. (3). Applications of digital system design using MSI, LSI, and VLSI circuits. Design of arithmetic logic units, multiple-input controllers, and practical interfacing techniques. PREREQUISITE: ELEC 2222.

4223-6223. Electrical Engineering Instrumentation. (4). (3222). Transducers for physical systems. Mechanical, temperature, acoustic, and biomedical transducers. Methods of processing and analyzing data. *Three lecture, three laboratory hours per week.* PREREQUISITE: ELEC 3212.

4230-6230. Data Communication Systems. (3). Data communications in information and computing systems. Analog and digital means of transmitting and controlling information. Organization and requirements of data communication systems including modulation and demodulation, multiplexing, switching, error detection and correction. PREREQUISITE: ELEC 3202.

4231-6231. Communication Theory. (3). Frequency and time domain. Modulation, random signal theory, autocorrelation; basic information theory, noise, communication systems. PREREQUISITE: ELEC 3202.

4232-6232. Discrete Signal Processing. (3). Introduction to deterministic and random discrete time signal analysis. Includes signal time averaging, digital filtering, spectral analysis, and detection and estimation of signals. Applications to computer processing biomedical, seismic, and radar signals. PREREQUISITE: ELEC 3202.

4233-6233. Satellite Communications. (3). Earth-satellite link model; signal processing and interfacing; modulation techniques for satellite systems; coding and synchronization techniques. PREREQUISITE: ELEC 4230 or 4231.

4234-6234. Error Correcting Codes. (3). Galois Fields algebra; current error correcting coding techniques for protection of digital data communication systems; random and burst error codes. PREREQUISITE: ELEC 4230 or 4231.

4235. Communications Laboratory. (1). Investigations in fundamental properties of communication systems; experimental procedures in spectral analysis, Fourier analysis, amplitude and frequency modulation, and filtering. *Three laboratory hours per week.* COREQUISITE: ELEC 4231.

4240-6240. Introduction to Quantum Electronics. (3). Quantum concepts, Schrodinger equation, quantization of electromagnetic radiation. Laser theory and application. PREREQUISITE: ELEC 3240.

4241-6241. Solid State Physical Electronics. (3). Quantum concepts; statistics; crystal structure; conduction processes in solids; p-n junctions and devices; field-effect devices; charge transfer devices. PREREQUISITES: ELEC 3211, 3240.

4242-6242. Electro-Optical Systems. (3). Principles of radiometry and the engineering aspects of electro-optical devices such as lasers, trackers, FLIRs, infrared sources and detectors. Video techniques for display and analysis. PREREQUISITE: ELEC 3202.

4243-6243. Linear Optical Systems. (3). Review of Fourier techniques for analysis and design of linear systems, extension to 2-dimensional techniques, 2-dimensional transform applied to linear optical systems and optical data processing. PREREQUISITE: ELEC 3202.

4251-6251. Control System Engineering. (3). General equations of physical linear systems and their transfer functions. Transient analysis and stability of servo systems. The Bode plot, Nichols chart, Nyquist plot, Routh criterion, root locus methods, introduction to compensation techniques and systems in state space. PREREQUISITES: ELEC 3202, 3221. COREQUISITE: ELEC 4253.

4252-6252. Digital Control Systems. (3). Problems and analysis techniques applicable to digital control systems. Prior knowledge of Laplace transforms required; basic knowledge of feedback control theory desirable. PREREQUISITE: ELEC 4251.

4253-6253. Control Systems Laboratory. (1). Investigations of fundamental properties associated with control systems engineering. Laboratory proce-

dures in analysis of control systems, compensating networks, analog and digital computer simulations. COREQUISITE: ELEC 4251.

4255-6255. Introduction to Robotics. (3). Review and application of kinematics, control systems and microprocessors to robot manipulators. PREREQUISITE: senior standing in Electrical Engineering.

4261-6261. Introduction to Network Synthesis. (3). Synthesis of canonical driving point and two port network impedances; design of two port networks and transfer function realizations utilizing active networks and techniques. Project required. PREREQUISITE: ELEC 3202.

4270-6270. Introduction to Microprocessors. (3). LSI circuitry, microprocessor architecture, hardware and software, application and system design. PREREQUISITE: ELEC 2222

4271-6271. Computer Interfacing. (3). Hardware and software aspects of connecting computers to peripherals, including tradeoffs between hardware and software. Connecting CPUs to ROM, RAM, parallel ports and serial ports. Applications of serial and parallel ports. Backplane buses, displays, keyboards, A/D and D/A converters. Linking interface routines to application software. PREREQUISITE: ELEC 2222 or permission of instructor.

4272-6272. Engineering Software. (3). Use of scientific software package, introduction to hierarchical operating systems; C programming language. PREREQUISITE: ELEC 3221 or permission of instructor.

4274-6274. Software Design with Ada. (3). Introduction to Ada. Detailed software design methodology using structured and object oriented techniques for large systems. Reusable components, Ada Programming Support Environment. PREREQUISITE: knowledge of a structured high level language.

4280. Electrical Engineering Design. (3). Individual and/or team design projects which require creative application of electrical engineering concepts. Oral and written presentations required. PREREQUISITES: ELEC 3202, 3212. [W].

4900-09-6900-09. Special Topics in Electrical Engineering. (1-3). Topics are varied and announced in *Schedule of Classes.*

4991. Electrical Engineering Projects I. (1-3). Independent investigation of problem selected in consultation with instructor; report required. PREREQUISITE: senior standing.

4992. Electrical Engineering Projects II. (1-3). Design, construction and testing of project investigated in ELEC 4991; report required. PREREQUISITE: ELEC 4991.

ENGINEERING TECHNOLOGY

PROFESSOR KENNETH CREMER Chair
Room 203, Technology Building

Q890 TECHNOLOGY (TECH)

1010. Introduction to Computer Usage (3). Instruction on how computers operate. Methods of communicating with computers through input and output devices. Elementary and familiar calculations programmed in BASIC. Hands-on operational experience with remote terminal equipment. *Two lecture, three laboratory hours per week.* PREREQUISITE: high school mathematics.

1210. Pascal Programming. (3). Computer usage in engineering technology; emphasis on use of Pascal programming in solving technical problems. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1010 or BASIC programming and MATH 1213.

1411. Introduction to Technology. (1). Emphasis on engineering technology programs as to content and opportunities upon graduation; technical applications, calculations and activities related to various technological disciplines; approaches to basic research techniques and problem solving.

1521. Graphics and Descriptive Geometry. (3). Introduction to graphic representation and presentation of orthographic projection, dimensioning, and pictorials. Sketching, drawing with instruments, introduction to

CADD and descriptive geometry. Interpretation of drawings. *Two lecture, three laboratory hours per week.*

1555. History of Architecture. (3). Major trends in architecture from prehistoric times to present. Emphasis on impact of technological and social changes on prevailing architectural styles.

1561. Building Assembly. (3). Comprehensive study of building types and building systems; emphasis on the effect of scale, site environmental control, materials, assembly systems and detail methods upon architectural design; the current state of building technologies. *Two lecture, three laboratory hours per week.*

1611. Forest Products Technology. (3). Lecture and related laboratory activities employed to study fundamental concepts of manufacturing, wood technology, wood products, and related wood processes. *Two lecture, three laboratory hours per week.*

1711. Manufacturing Processes I. (3). Introduction to manufacturing processes and machine tool technology used to shape materials into useful products. Coverage of threads, dimensioning, and surface finish. U.S. and metric systems. Laboratories are conducted utilizing traditional machine operations. *Two lecture, three laboratory hours per week.*

1811. Electronics Technology I. (3). Introduction to fundamental electrical and electronic theory and devices, circuit and network theorems, laboratory emphasis on basic electrical measurements and proper use of instruments. *Two lecture, three laboratory hours per week.* PREREQUISITE: MATH 1213.

2010. Microcomputer Applications. (3). Application programs including MS-DOS, word processing, spreadsheets, data bases. Hands-on operational experience with microcomputers. *Two lecture, three laboratory hours per week.*

2230. Pulse and Digital Circuits. (4). Analysis and design of pulse and digital electronic circuits using discrete transistors. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2821.

2251. Advanced Programming Techniques. (4). Principles of computer programming applicable to engineering technology using Fortran77. Algorithmic problem solving, coding in a structured high level language, subprograms and parameters, control structures, I/Q, complex arithmetic, and double precision operations emphasized. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 1010 or 1210. CQREQUISITE: TECH 3044.

2261. Data Structures. (4). (3251) Application of high speed digital computer to problems associated with storage and retrieval of numeric and non-numeric data in engineering systems. Includes representation and organization for storing of data, searching and sorting techniques, decision tables, and file maintenance techniques. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 1210.

2451. Introduction to Surveying. (3). (1451). Surveying practices, calculations, and use of topographical conventions. *Two lecture, three laboratory hours per week.* PREREQUISITE: MATH 1213.

2555. Architectural Design I. (4). Fundamentals of architectural design; basic techniques of drafting, perspectives, presentation and working drawings. *Three lecture, three laboratory hours per week.* PREQUISITES: TECH 1521 and 1561.

2556. Site and Environmental Planning. (3). Building sites; selection and utilization, including environmental influences. Technical aspects such as zoning, contour lines, parking, ingress/egress, site drainage, building location and landscaping. *Two lecture, two laboratory hours per week.* PREREQUISITE: TECH 2555.

2820. Electronics Technology II. (3). (1821). Circuit analysis methods in modern electronics technology. Laboratory confirmation of mathematical solutions to problems involving Direct and Alternating Currents. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 1811 and a programming language.

2821. Electronics Technology III. (3). Theory of solid state devices with applications in power supplies, amplifiers and other basic electronic circuits, solid-state diodes, bipolar junction transistors and field effect transistors emphasized. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 1811 and a programming language.

2831. Electronics Technology IV. (3). Theory of semiconductor devices and their application in discrete, packaged and integrated multistage circuits. Emphasis on packaged and integrated circuits. *Two lecture, three*

laboratory hours per week. PREREQUISITE: TECH 2821.

3044. Analysis for Engineering Technology. (4). (2944). Application of mathematical, scientific, and engineering principles to solution of technology problems, using a variety of examples from various major areas in Technology. Students analyze and provide acceptable solutions to ascending order of well designed problems using language and techniques or related technological disciplines and selected areas of mathematics, such as algebra, trigonometry, calculus, and differential equations. *Three lecture, three laboratory hours per week.* PREREQUISITE: MATH 1321. [C].

3232. Digital Technology. (3). Numbering systems and codes, logic gates, Boolean algebra, Combinational logic, TTL circuits, and memory devices. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2230.

3233. Microprocessor Technology. (4). Industrial and commercial applications of microcomputers and microprocessors; theory of operation of MSI and LSI logical devices, memory and input/output devices; techniques of microprogramming, testing and maintenance. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3232.

3251. Assembly Language Programming. (4). (4251). Investigation of a particular mini-computer from programmer's viewpoint. Includes machine representation of data, instruction formats, machine operation and addressing techniques, input/output, and interrupts. Applications include use of minicomputers for numerical control and in sensor based systems. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3233.

3281. Computer Aided Circuit Design. (4). Utilization of commercially available computer software for electronic circuit documentation, analysis, and design. Emphasis on schematic capture, circuit simulation, automatic printed-circuit board design, and VLSI design. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2831.

3350. Fluid Power. (3). Fundamental principles of hydraulic and pneumatic systems; emphasis on fluid instrumentation, control, and measurement. *Two lecture, three laboratory hours per week.* PREREQUISITE: MATH 1213.

3386. Occupational Safety. (3). (3387). Hazards and safety procedures for general industry and construction.

3400. Forces and Force Systems. (3). Force systems and their solution; that branch of mechanics which deals with forces and effects of forces acting upon rigid bodies at rest. COREQUISITES: TECH 3044, PHYS 2111.

3401. Strength of Materials. (3). Analysis and study of structural materials. PREREQUISITE: TECH 3400.

3408. Industrial Materials. (3). Properties of structural materials and methods used to test for these properties.

3409. Materials Testing Practicum. (1). Qualitative material properties with emphasis on standards, specifications, and methods of testing along with significance of data collected as well as practice of interpreting and preparing reports of results of investigation.

3414. Construction Administration. (3). Ethical practice, social responsibility, licensing, codes, and public regulation of contracting, specification writing and interpretation, functions of architect-engineer and owner, construction contracts, bonding, insurance, indemnification, labor agreements and jurisdictional procedures, joint venture and subcontract relationship.

3421. Manufacturing Processes II. (3). Processes and techniques used to shape materials into useful products. Techniques include cutting, molding, stamping, extruding and powdered metallurgy. Major emphasis on principles and applications of numerical controls. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1711.

3440. Project Cost Evaluation. (3). Industrial as well as personal financial situations and how they are affected by interest rates and "Time Value" of money. Investigation of economic alternatives including applications of existing formulas, techniques, and methods. *Three lecture hours per week.*

3451. Construction Surveying Methods. (3). Methods, techniques and formulas necessary to establish controlling points at any construction site. Both office and field procedures required to locate centerlines

and bounds of structures. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2451.

3471. Structural Design I. (3). Fundamentals of structural design and analysis of steel and timber buildings and building components. PREREQUISITES: MATH 1321, TECH 3401.

3472. Structural Design II. (3). Fundamentals of structural design and analysis of concrete buildings and building components. PREREQUISITES: MATH 1321, TECH 3401.

3520. Architectural Design II. (4). Basic design concepts and methods as applied to building types, design, construction, and systems for units of contemporary architecture. *Three lecture, three laboratory hours per week.* PREREQUISITES: TECH 2556, 3471.

3525. Building Codes and Regulations. (3). (4525). General and local codes and regulations that influence design and construction of buildings. PREREQUISITE: TECH 2555.

3531. Mechanical Equipment in Construction. (3). Studies in environmental technologies in architecture; mechanical systems, plumbing, electrical and energy conservation. PREREQUISITE: PHYS 2111.

3561. Computer Applications in Architecture. (3). Computer Aided Drafting and Design applications to produce computer generated architectural design and working drawings. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 1010, 2010, 2555.

3573. Dynamics and Mechanical Design. (3). Basic consideration of kinematics, linkages, mechanisms and their relation to dynamic properties such as force, mass and acceleration. PREREQUISITES: TECH 3044, 3400.

3591. Land Surveying. (3). Historical background of property surveys. Writing adequate land descriptions. Interpretation of old descriptions. Excess and deficiency. Riparian rights. Field practice. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2451.

3691. Construction Estimating. (3). Fundamentals of commercial and light frame estimating. Emphasis given to conducting a quantity survey, including unit and overhead costs. PREREQUISITE: TECH 2555.

3718. Welding and Metallurgy. (3). (3731). Properties of metals; emphasis on physical and mechanical properties related to welding, cold and hot working; heat treating and testing. *Three lecture, two laboratory hours per week.*

3811. Electronics Communications. (3). Principles of noise, oscillators, modulation and vacuum tube power amplifiers with associated circuitry. Transmission line and antenna theory. Emphasis on operating frequencies up to UHF. *Two lecture, three laboratory hours per week.* PREREQUISITE TECH 2831.

3821. Industrial Electronics. (3). Electronic circuits and systems in modern industry. Principles of open and closed loop control systems. Theory and application of devices and thyristors such as unijunction transistors, silicon controlled rectifiers, diacs and triacs. *Two lecture, three laboratory hours per week.* PREREQUISITES: TECH 2831, 3044.

3822. Control Instrumentation. (4). Theory of application of automatic control equipment, including programmable logic controllers and computer control. Principles and operation of pneumatic, hydraulic and electrical control systems. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3821.

3841. Advanced Applied Electricity. (3). Generation and utilization of single and polyphase electrical power in home and industry; DC and AC generators, motors, regulators and meters in both individual and systems applications. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 2820.

3940. Analytic Approaches to Public Fire Protection. (3). Systems analysis and its use and limitations in fire protection and other problem areas. Illustrated with case studies and models using the systems approach to fire suppression and prevention. PREREQ: UISITE: admission restricted to students seeking B.P.S degree in Fire Administration or Fire Prevention Technology.

3942. Fire Related Human Factors. (3). Dynamics of human behavior in fire incidents related to building design, codes and ordinances, and other fire prevention practices. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.

4944. Fire Protection Structure and Systems Design. (3). Design principles involved in protection of structure from fire involvement. Empirical tests and prediction procedures. Control detection, and suppression system design practices. Fundamentals of hydraulic design of sprinkler and water spray systems with recent innovations. PREREQUISITE: admission restricted to students seeking B.P.S. degree in Fire Administration or Fire Prevention Technology.

4945. Incendiary Fire Analysis and Investigation. (3). Procedures and techniques for collection, comparison, and analysis of physical evidence related to fire origin; principles of evidence of ignition phenomenon and propagation variables; legislative, economic, psychological, and sociological variables of incendiary fire; role of insurance and government programs. PREREQUISITE: students of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

4946. Fire Dynamics. (3). Fire propagation phenomenon in both fuel and air regulated phases; variables in pre- and post-flashover fire development; geometric, material, gaseous, fluid flow, and thermodynamic parameters; compartment and building fire models. PREREQUISITE: student of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

4947. Applications of Fire Research. (3). Fire research and its application; transfer and implications of available research results for fire prevention and protection programs; national and international studies and research developments. PREREQUISITE: student of B.P.S. degree in Fire Administration or Fire Prevention Technology program.

4234. Microprocessor Interfacing Techniques. (4). Application of microprocessors to equipment; emphasis on interface problems. Techniques employing conventional Logic devices as well as LSI components. Testing and maintenance techniques of equipment using microprocessor based design. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 1233.

4235. Microcomputer Systems. (4). Design and construction of complete microcomputer system including microprocessor, RAM, EPROM, input-output devices, and assembly language operating system. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 4234.

4261-6261. Computer Applications in Technology. (4). Applications of the C programming language to problems from selected areas of engineering technology. Includes data collecting, modeling techniques, constraints, program development and validation, and interfacing with peripherals and machine language. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2251. COREQUISITE: TECH 3251.

4271. Computer Techniques. (4). Advanced computer techniques in industry. Includes APT programming for NC machine tools, application of computer to solve PERT networks and applications in production planning and control. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 2251.

4272. Operating Systems and Data Communications. (4). Introduction to operating system principles and data communications; includes networking of computers. Emphasis on hardware and software interaction in overall system. *Three lecture, three laboratory hours per week.* PREREQUISITES: TECH 233, 3251.

381. Principles of Supervision. (3). Functions of supervisory personnel.

460. Motion and Time Analysis. (3). Methods of improvement, motion economy, and development of me standard by direct observation, predetermined time standards, and synthesis.

462. Statistical Quality Control. (3). Statistical methods for analyzing quality problems; include control charts for variables and attributes; single, double and multiple lot-by-lot acceptance sampling plans; and computer applications to quality assurance. [C].

464. Production Control. (3). Manufacturing planning and control. Topics include material requirements planning, shop-floor control, purchasing, master production scheduling and just-in-time techniques. PREREQUISITE: TECH 4460.

466. Plant Layout. (3). Designing a plant with respect to material handling, machine location, auxiliary

services, capital requirements, safety, and personnel organization. PREREQUISITE: TECH 4464.

4472-6472. Computer Aided Design. (3). Overview of computer aided design (CAD) technology; underlying principles, integrated systems philosophy, disciplinary and industrial applications, hardware and software principles, management and human aspects benefit. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1521.

4474-6474. Automation and Robotics. (3). (4476). Concepts of factory automation and industrial robotics. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1010.

4476-6476. Computer Aided Manufacturing. (3). (4474). Use of computers in manufacturing including product, instrumentation and process environments. Hardware and software fundamentals. Survey of numbering systems and digital electronics. Emphasis on applications and management aspects of computer aided manufacturing systems. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1010 or 1210.

4510. Construction Planning and Scheduling. (3). Principles of planning scheduling, organizing, and controlling construction projects. Studies in critical path method (CPM) and PERT, with resource leveling and financial scheduling. Computer applications in CPM and PERT emphasized.

4512. Soil Technology in Construction. (3). Soil technology as applied to construction field. Fundamental properties of soils with application to foundations, highways, retaining walls and slope stability. Relationship between soil characteristics and geologic formations. *Two lecture, three laboratory hours per week.* PREREQUISITE: PHYS 2111.

4515. Architectural Design III. (4). Design concepts and methods as related to mass horizontal and vertical architectural development. *Three lecture, three laboratory hours per week.* PREREQUISITES: TECH 3472, 3520, 3525.

4520. Construction Methods and Equipment. (3). Theory and practice of construction operations, equipment utilization, construction methods, analysis of costs, crew and equipment.

4530. Architectural Specifications and Contracts. (3). Examination of typical contract documents beginning with agreement between architect and owner and continuing through construction. Emphasis on roles and responsibilities of each party. CSI format for specifications, including proper organization, writing and utilization of complete set of specifications. PREREQUISITES: TECH 3520, ENGL 3601.

4571. Tool Design. (3). Concepts of geometric tolerancing in design of tools for fabrication and assembly; development and implementation of tooling, dies, jigs, and fixtures; ANSI and ISO standards applied to all design concepts; Board drawing and CADD in lab activities. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 1521. COREQUISITE: TECH 4472.

4615. Architectural Design IV. (5). Architectural Schematics and Design presentation. Design presentation concepts as applied in architectural practice, municipal planning and realted city and urban design and development. Techniques and philosophies of schematic and oral presentations. Field trips to architectural and community planning offices. *Three lecture, four laboratory hours per week.* PREREQUISITE: TECH 4515.

4821. Microwave Technology. (4). Generation and transmission of energy at frequencies above 300 megahertz, emphasizing techniques and equipment which contrast sharply with those at lower frequencies. *Three lecture, three laboratory hours per week.* PREREQUISITE: TECH 3811.

4841. Video Communications. (3). Theory and application of technical equipment for generation, transmission, and reception of video signals, both closed circuit and broadcast. *Two lecture, three laboratory hours per week.* PREREQUISITE: TECH 3811.

4944. Problems In Technology. (3). Study and research in specific area culminating in an integrating experience through individual and/or group projects and technical reports. PREREQUISITE: seniors within two semesters of graduation. [W].

4950-6950. Product Safety Management. (3). (3921, 3931). Study of modern concepts of accident

prevention by means of safety analysis. Analyses of responsibilities and requirements of management in producing safe consumer products. Emphasis on electrical and mechanical hazards.

MECHANICAL ENGINEERING

PROFESSOR WILLIAM S. JANNA, Chair
Room 312A, Engineering Building

Q870 MECHANICAL ENGINEERING (MECH)

1306. Mechanical Engineering Fundamentals. (1). Problem formulation, units/dimensions, computer as an engineering tool, engineering history and other selected topics.

1307. Mechanical Engineering Computing. (3). Emphasis on computer solutions of mechanical engineering problems.

1308. Engineering Graphics (2). (ENGR 1021). Role of graphical communication in engineering practice; sketching and drafting techniques used in design, elements of descriptive geometry. *One lecture/three laboratory hours per week.* COREQUISITE: MATH 1321 or consent of instructor.

2332. Dynamics. (3). Kinematics and kinetics of particles and rigid bodies. PREREQUISITE: CIVL 2131.

3305. Mechanical Instrumentation and Measurement. (3). Accuracy, precision and statistical consideration of measurement data; dynamics of measurement; displacement, velocity acceleration, force, torque, pressure and temperature measurement; mechanical impedance; measurement of fluids and instrumentation systems. PREREQUISITES: MECH 2332; ELEC 2201, 2203.

3306. Mechanical Instrumentation Laboratory. (1). Introduction to sensors and basic instrumentation systems used in mechanical engineering; emphasis on experimental techniques and reporting of results. *Three laboratory hours per week.* COREQUISITE: MECH 3305.

3311. Engineering Thermodynamics I. (3). Laws of thermodynamics and their applications to engineering problems. PREREQUISITES: MATH 2322; PHYS 2512.

3312. Engineering Thermodynamics II. (3). Applications of thermodynamics laws; emphasis on real gases, real gas mixtures, combustion, gas cycles and vapor cycles. PREREQUISITES: MECH 3311, CHEM 1112.

3320. Engineering Materials. (3). (3361) Nature of six main classes of materials: metals, polymers and elastomers, ceramics and glasses, semiconductors, superconductors and composites. Mechanical, thermal, electrical and electronic, magnetic and optical properties of materials. Environmental effects on performance of materials: creep, corrosion, oxidation. Methodology for selection of materials for named applications. PREREQUISITES: PHYS 2512, CHEM 1112.

3321. Kinematics and Dynamics of Machines. (3). Velocity and acceleration analysis of linkages and mechanisms. Force analysis of linkages and mechanisms and machinery such as IC engines. Gyroscopic forces and moment-of-inertia determination. Dynamic balance of rotors and reciprocating masses. PREREQUISITES: MECH 2332, 3341; MATH 3391.

3322. Mechanics of Materials. (3). (Same as CIVL 3322). Analysis of components subjected to tension, compression, bending moment, torque; combined loading; Mohr's stress circle; deflection of beams; simple treatment of column buckling. PREREQUISITE: CIVL 2131.

3323. Mechanical Design and Analysis. (3). Methodology and practice in designing machine components by integrating principles from mechanics of materials, failure theory, fatigue, economics and other principles. PREREQUISITE: MECH 3322.

3325. Materials Laboratory. (1). Materials testing and evaluation. *Three laboratory hours per week.* COREQUISITE: MECH 3322. PREREQUISITE: MECH 3320.

3331. Mechanics of Fluids. (3). Statics and dynamics of fluids; applications to measurement of properties of

water and air flows. PREREQUISITE: MECH 2332, 3311.

3335. Fluids Laboratory. (1). Principles of fluid mechanics are demonstrated and verified. Familiarization with instrumentation and techniques in organizing and reporting results of experimental investigations. *Three laboratory hours per week.* COREQUISITE: MECH 3331.

3341. Mechanical Engineering Analysis. (3). Engineering methods, classical analysis, computer techniques, and their interactions with mechanical engineering problems. PREREQUISITE: MATH 3391. [C].

4300. Senior Seminar. (1). Ethics and professionalism, literature searching, proposal writing, technical paper presentations and other selected topics. Oral and written reports required. Taking the EIT exam is recommended. PREREQUISITE: senior status or consent of instructor.

4309. Gas Dynamics. (3). Thermodynamics of fluid flow including dynamic and energy relations, adiabatic and diabatic flows. PREREQUISITE: MECH 3312.

4311. Heat Transfer I. (3). Fundamentals of conduction, convection, and radiation heat transfer with emphasis on conduction and convection. Introduction to heat exchanger design. PREREQUISITES: MECH 3312, 3331, 3341.

4312. Power Generation. (3). Application of principles of thermodynamics, fluid mechanics and heat transfer to conversion of useful energy. Includes terrestrial and thermodynamic limitations, power plants, nuclear energy, solar energy, and direct energy conversion. Technical report writing. PREREQUISITE: MECH 3312.

4313-6313. Heat Transfer II. (3). Principles of boiling, condensing, and radiation heat transfer. Fundamentals of heat exchanger design. PREREQUISITE: MECH 4311.

4314. Fluid/Thermal Systems Design. (4). Design of piping systems; pipe size selection using economic; fluid meter selection; prime movers and piping systems; heat exchanger analysis, selection and design; economics of heat exchanger selection; analysis of fluid/thermal components as a system. Group project required. PREREQUISITE: MECH 3331; COREQUI-
SITE: MECH 4311.

4315-6315. Heating, Ventilation and Air Conditioning. (3). Psychrometric analyses, heating and cooling loads of buildings and analyses of air conditioning systems. COREQUI-
SITE: MECH 4311.

4320. Mechanics of Materials II. (3). Stress-strain analyses of thin-walled cylinders and spheres, springs, laterally-loaded struts, struts with initial curvature, rotating disks and cylinders; plastic yielding of beams and shafts; introduction to energy methods. PREREQ-
UISITES: MECH 3320, 3322.

4322. Mechanical Design. (3). Analytical treatment of methods used in design process including creativity, probability, and optimization as applied to design process, from concept through preliminary design to final design. PREREQUISITE: MECH 3323.

4323. Machine Design. (4). System design concepts applied to machine components; integration of these components into an overall system. Design project assignments. PREREQUISITE: MECH 4322.

4324-6324. Computer Aided Design. (3). Use of digital computer in design of mechanical components and systems. Design project assignments. PREREQ-
UISITE: MECH 3323.

4325-6325. Advanced Mechanics of Materials. (3). Beams on elastic foundations, experimental stress analysis, torsion of non-circular sections, curved beam theory, unsymmetrical bending. PREREQUISITE: MECH 3322.

4326-6326. Biomedical Systems Analysis-Mechanical. (3). (3326). Introduction to concepts used in analyzing living systems. Simulation of body functions with mechanical and computer models. Familiarization with design of mechanical bioengineering devices such as heart valves, heart-lung machines, renal dialysis machines. PREREQUISITES: MECH 2332, 3322.

4330-6330. Introduction to Composite Materials. (3). Introduction to fiber reinforced composite materials. Includes mechanical behavior, strength, design methodology, and implementation of computer aided design. PREREQUISITES: MECH 3320, 3322.

4331. Turbomachinery. (3). Basic principles of fluid mechanics and thermodynamics with application to rotating devices. Ideal and actual operating characteristics of pumps, fans, turbines and compressors. Constraints on design of real systems. PREREQUISITE: MECH 3331.

4333-6333. Aerospace Propulsion Systems. (3). Fundamentals of airbreathing and rocket propulsion devices. Principles of combustion thermodynamics, gas turbine operation, solid and liquid propellants, performance evaluation, and atmospheric and space mission propulsion requirements. PREREQUISITE: MECH 4309 or equivalent.

4335. Thermodynamics and Heat Transfer Laboratory. (1). Instrumentation and measurement techniques used in thermodynamics and heat transfer studies. Experimental verification of basic principles with emphasis on organizing and reporting of results. *Three laboratory hours per week.* PREREQUISITE: MECH 3312. COREQUI-
SITE: MECH 4311.

4337-6337. Internal Combustion Engines. (3). Principles of Otto and Diesel cycle engines. Effects of various fuels and fuel delivery systems, air induction systems, ignition systems, and pollution control techniques on engine performance. PREREQUISITES: MECH 3312, 3331.

4340-6340. Manufacturing Processes. (3). Introduction to manufacturing processes: fundamentals of mechanical behavior of materials, manufacturing properties of materials; casting, bulk deformation, sheetmetal forming, material removal processes; processing of polymers, ceramics and glasses, composite materials; powder metallurgy; fastening and joining processes; nontraditional manufacturing processes; economics of integrated design and manufacturing; recent developments in manufacturing. PREREQUISITES: MECH 3320, 3322.

4344. Mechanical Controls. (3). Fundamental classical control concepts. Modeling of linear mechanical control systems. Transient, accuracy and performance analyses and design of control systems using root locus sketch, Nyquist diagrams and Bode plots. PREREQUISITE: MECH 3321.

4345-6345. Design of Mechanisms. (3). Graphical and analytical mechanism synthesis techniques for path generation, function generation, rigid body guidance and optimization of force transmission characteristics. PREREQUISITES: MECH 3321, 4322.

4346. Advanced Mechanical Controls. (3). Advanced modeling of mechanical control systems. System compensation and controller design. Introduction to modern control theory, nonlinear control systems and digital control systems. PREREQUISITE: MECH 4344.

4350-6350. Mechanics for Biomedical Engineers. (4). Analyses of the bone and joint structure of the body related to the basic mechanical equations and properties. Mathematical modeling of bone structure, mechanical properties, static loading, dynamic loading, fatigue, wear, corrosion. PREREQUISITES: MECH 3320, 3322.

4360. Selection of Engineering Materials. (3). Detailed study of main classes of materials and their properties and uses; design criteria for various failure modes and selected environment case studies, technical tutorials and design exercises. PREREQUI-
SITES: MECH 3320, 3322.

4369. Process Heat Transfer. (3). Engineering concepts and fundamental principles dealing with single and two phase fluid dynamic and heat transfer to design and analysis of process heat transfer equipment. PREREQUISITE: MECH 4311.

4371-6371. Mechanical Vibrations. (3). Kinematics of harmonic and non-harmonic vibrations; system of one and several degrees of freedom, free and forced vibrations; self-excited vibrations. PREREQUISITES: MATH 3391; MECH 3321, 3341

4391. Mechanical Engineering Projects. (1-3). Independent investigation of mechanical engineering problems in consultation with instructor. PREREQUI-
SITE: senior standing.

The Loewenberg School of Nursing

NORMA J. LONG, B.S.N., M.S.N., D.N.Sc., Dean
Room 316, Manning Hall

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
*	Nursing		Bachelor of Science in Nursing (B.S.N.)

*The School is not comprised of departments.

PURPOSES

The primary function of the Loewenberg School of Nursing is to offer a program of study designed to prepare students for careers in professional nursing. As a part of a comprehensive university, the School of Nursing is dedicated to the development of scholarship in nursing and to providing services supportive of the institutional

mission. The School of Nursing is committed to the following purposes: (1) Provide a curriculum leading to the degree of Bachelor of Science in Nursing basic to beginning professional practice and graduate study in nursing; (2) Promote the intellectual, personal and professional development of students by offering a curriculum which combines a strong liberal education with the professional major; (3) Provide a plan of study with flexible options

that are responsive to the individual learner's needs; (4) Encourage the use of opportunities available in a comprehensive university setting to foster values, attitude and personal qualities essential to living fulfilling life and contributing to society; (5) Produce graduates who demonstrate competence in conceptual, functional and interpersonal skills basic to beginning professional nursing practice in a variety of settings.

ORGANIZATION

The School of Nursing is organized as one unit under the leadership of a dean. The curriculum leading to the degree of Bachelor of Science in Nursing includes general education and support courses offered through other units of the university and the major requirements offered by the School of Nursing. A comprehensive approach to health care is emphasized through utilization of a wide variety of health care settings available in Memphis and the surrounding community.

The faculty of the School of Nursing represents all clinical areas of nursing practice and a variety of experiences and interests. They reflect this diversity in their teaching, practice and research and thus are well qualified, in addition to academic credentials, to function as facilitators of learning. The undergraduate program is accredited by the National League for Nursing.

ADMISSION

All students who wish to earn the Bachelor of Science in Nursing must be admitted to the School of Nursing. To be admitted to the School of Nursing, a student must: (1) be admitted to Memphis State University as a regular undergraduate student; (2) have completed a minimum of 30 semester hours of required course work, including 3 hours in math and 3 hours in a social science; and the following with a minimum grade of C: ENGL 1101 and 1102, BIOL 1731 and 1732, and CHEM 1101 and 1102; (3) have a minimum overall quality point average of 2.0; and (4) make application for admission to the School of Nursing.

ACADEMIC ADVISING — BASIC STUDENTS

Basic students who are completing courses required for admission to the School of Nursing receive advising through the Academic Counseling Unit located in Scales Hall. The Assistant to the Dean of the School of Nursing, however, will be happy to answer inquiries from students regarding admission requirements. Following admission to the School of Nursing, each student is assigned a School of Nursing advisor. The advisor will assist the student in planning for completion of the BSN program and will provide the opportunity for meaningful discussion regarding academic progress and career goals. This assistance, however, does not in any way relieve the student of the primary responsibility for studying the *Catalog* and fulfilling all the requirements for the degree.

ACADEMIC ADVISING - RN STUDENTS

Each Registered Nurse student who is admitted to Memphis State University and

who declares Nursing as a major is assigned a School of Nursing advisor. The advisor will assist the student with academic planning including formal application for admission to the School of Nursing. Following admission, the advisor will assist the student with planning for completion of the BSN program and will provide the opportunity for meaningful discussion regarding academic progress and career goals. The assistance, however, does not in any way relieve the student of the primary responsibility for studying the *Catalog* and fulfilling all the requirements for the degree.

LOANS AND SCHOLARSHIPS

Students are encouraged to inquire about financial assistance through the Student Financial Aid Office. Some scholarships are also available through the School of Nursing. Applications for scholarships are available in the School of Nursing office.

RESIDENCY

University residence requirements are explained in detail in the *Graduation from the University* section of this catalog. Note that students transferring from a community or junior college must complete a minimum of sixty semester hours in an accredited senior institution.

DEGREE REQUIREMENTS

1. To qualify for the degree of Bachelor of Science in Nursing, the student must complete a minimum of 132 semester hours with the minimum overall quality point average of 2.0 and must meet specific grade requirements described below.
2. A minimum grade of C must be earned for English 1101, 1102, each required natural science course, each required upper division course, and each required nursing course.
3. Of the 132 semester hours required for graduation, at least 42 semester hours must be in courses from the Upper Division and a minimum of 60 hours must be from an accredited senior institution.
4. Detailed course requirements are described below under General Education Requirements, Other Support Course Requirements, and Nursing Course Requirements.

General Education Requirements

English Composition (6 hours): ENGL 1101, 1102, with a minimum grade of C.

Oral Communication and Rhetoric (3 hours): COMM 2381.

Mathematics (3-6 hours): MATH 1181 and 1182; or one of the following: MATH 1312, 1321, or 2000.

Literary Heritage (3 hours): ENGL 2201.

Fine Arts Heritage (3 hours): ART 1101, COMM 1851, DANC 1151, MUHL 1101, or THEA 1551.

Historical/Philosophical Heritage (6 hours): One course from **pre-1500:** CLAS 2481, HIST 1301, PHIL 1101, POLS 1101, UNIV 2850, UNIV 3580; plus one course from **post-1500:** HIST 1302, PHIL 1102, POLS 1102, UNIV 3581.

American Heritage (6 hours): HIST 2601 or 2602; plus one of the following: ANTH 3282, GEOG 3401, HIST 2601, HIST 2602, HIST 3863, HIST 4851, HIST 4881, POLS 4212, POLS 4405, SOCI 3422.

Social Science (6 hours): One course from list A and one from B:

A. (Global Perspective): ANTH 1200, CJUS 2110, ECON 2110, GEOG 1301, GEOG 1401, POLS 2301, POLS 2501, PSYC 2201, SOCI 2100, SOCI 2101/HMEC 2101, UNIV 2304.

B. PSYC 1101, SOCI 1111.

Natural Science (8 hours — Sequence required): CHEM 1101, 1102 or CHEM 1121, 1131, 1122, 1132, with a minimum grade of C. (Completed in the past 7 years. Refer to Science Course Validation Section.)

Fitness and Wellness: (4 hours): HPER 1100 plus two semester hours of physical activity from the following: any 1000 level PHED course; DANC 1821, 1825, 1827, 2821, 2825, 2827; MUAP 2002, THEA 2501; AERO 1111, 1112, 2211, 2212; ARMY 2110, 2190, 3110, 3120, 3190, 4110, 4120; NAVY 1100, 1103, 2200, 3200, 3000.

Computation Intensive (3 hours): At least one upper division course designated as computation intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education mathematics requirement.

Writing Intensive (3 hours): At least one upper division course designated as writing intensive and approved by advisor. **Prerequisite:** Satisfactory completion of the General Education English composition requirement.

Integrative (3 hours): At least one upper division course designated as integrative and approved by advisor. **Prerequisite:** Satisfactory completion of General Education English composition, oral communication, and mathematics requirements.

Computer Literacy: COMP 1200, NURS 3003, a course approved by the dean, or satisfactory score on university-approved computer literacy examination.

Support Course Requirements

Biology (15 hours): BIOL 1731, 1732, 1400, 3440, with a minimum grade of C. (Completed in the past 7 years. Refer to Science Course Validation Section.)

Growth and Development (3 hours): EDPS 2111.

Nutrition (3 hours): HMEC 2202.

Statistics (3 hours): EDRS 4541 [C] with a minimum grade of C.

Nursing Course Requirements — Basic Students

Nursing (57 hours): NURS 2010, 3000, 3002, 3101, 3010, 3020, 3030, 3040, 4010, 4020, 4030, 4100, 4110.

Nursing Elective (3 hours): NURS 3003, 4300-09, 4800, or any approved Nursing elective course.

Nursing Course Requirements — RN Students

- I. For students who will enroll in the first course of the clinical nursing sequence (NURS 3102, 3200, 4000,

4200) by the Fall 1990 semester and complete the sequence in the Spring 1992 semester.

Nursing (36 hours): NURS 3000, 3002, 3101, 3102, 3200, 4000, 4100, 4110, 4200.

Nursing Elective (3 hours): NURS 3003, 4300-09, 4800, or any approved Nursing elective course.

The remaining hours for the major requirement are fulfilled by validation of transfer credit hours in nursing for RN students.

Before enrolling in the first clinical nursing course, NURS 3102, the student must have achieved a total test score (standard score) of 195 or above on the NLN Comprehensive Nursing Achievement Test within the past two years and must have completed all prerequisite courses.

II. For students who will first enroll in clinical nursing courses in the Spring 1991 semester or thereafter.

Nursing (37 hours): NURS 3000, 3002, 3101, 3050, 4010, 4020, 4030, 4100, 4110.

Nursing Elective (3 hours): NURS 3003, 4300-09, 4800, or any approved Nursing elective course.

The remaining hours for the major requirement are fulfilled by validation of transfer credit hours in nursing for RN students.

The following are representative curriculum plans for basic and registered nurse students:

BASIC STUDENTS

FRESHMAN YEAR

ENGL 1101	3	ENGL 1102	3
BIOL 1731	4	BIOL 1732	4
CHEM 1101	4	CHEM 1102	4
HPER 1100	2	*MATH	3
*Social Science	3	*Fine Arts Heritage	3
	16		17

SOPHOMORE YEAR

ENGL 2201	3	COMM 2381	3
BIOL 1400	4	NURS 2010	6
EDPS 2111	3	*Social Science	3
HMEC 2202	3	*HIST/Phil Heritage	3
*American Heritage	3	*Physical Activity	2
	16		17

JUNIOR YEAR

NURS 3101	3	NURS 3002	2
NURS 3000	3	BIOL 3440	3
NURS 3010	4	NURS 3020	5
NURS 3030	5	NURS 3040	5
	15		15

SENIOR YEAR

EDRS 4541 [C]	3	*HIST/Phil Heritage	3
NURS 4010	6	NURS 4030	6
NURS 4020	6	NURS 4100	3
*American Heritage	3	NURS 4110	3
		Nursing Elective	3
	18		18

* Refer to *Graduation From the University* section of bulletin for approved courses.

RN - I

(Upper Division Requirements)

JUNIOR YEAR

NURS 3102	3	NURS 3200	6
NURS 3002	3	BIOL 3440	3
NURS 3101	3	Elective	3
NURS 3000	3		
	12		12

SENIOR YEAR

NURS 4000	6	NURS 4200	6
NURS 4100	3	NURS 4110	3
EDRS 4541 [C]	3	Nursing Elective	3
	12		12

RN - II

(Upper Division Requirements)

JUNIOR YEAR

NURS 3101	3		
NURS 3002	2		
NURS 3000	3		
BIOL 3440	3		
NURS 3050	5		
	16		16

SENIOR YEAR

NURS 4010	6	NURS 4030	6
NURS 4020	6	NURS 4100	3
EDRS 4541 [C]	3	NURS 4110	3
	15	Nursing Elective	3
	15		15

Science Course Validation: If seven years has lapsed since credit was earned in BIOL 1731 and 1732 (Anatomy and Physiology), BIOL 1400 (Microbiology), or CHEM 1101 and 1102, or CHEM 1121/1131 and 1122/1132, the content is considered outdated and students are required to either repeat the course(s) or validate currency of knowledge. Validation of current knowledge may be accomplished by taking a higher level course in the same field or by examination. The NLN tests in Anatomy and Physiology, Chemistry and Microbiology are used for this purpose. A score at the fiftieth percentile or above is required.

Progression and Retention Criteria:

The clinical component of nursing courses must be completed satisfactorily for the student to receive a passing grade in the course. A student who fails to earn a grade of C or better in a clinical nursing course may repeat the course one time. Failure to earn a grade of C or better on the repeated course will result in dismissal from the School of Nursing. A maximum of two clinical courses may be repeated. A student who fails a third clinical nursing course will not be allowed to progress in the School of Nursing.

Clinical Nursing Course Requirements: Prior to enrolling in a clinical nursing course, students must present evidence of current CPR certification, professional liability insurance (\$1,000,000 per occurrence/\$3,000,000 aggregate minimum coverage), statement of good health including negative tubercular skin test or chest x-ray and appropriate immunizations. R.N. students are also required to present evidence of current licensure. Students are encouraged to complete these requirements during the semester prior to anticipated enrollment. No student will be allowed to participate in clinical learning experiences unless these requirements are satisfied.

Credit By Exam: Credit for some of the upper division nursing courses may be earned through credit by examination. Other methods of earning credit are explained in detail in the *Academic Regulations* section of this catalog.

Nursing Course Descriptions

U970 NURSING (NURS)

2010. Introduction to Nursing. (6). Principles and concepts basic to the practice of professional nursing; focus on the development of nursing knowledge and beginning skills necessary for the promotion of health and the prevention of illness in the individual. *Three lecture, nine clinical/laboratory hours per week.* PREREQUISITE: Admission to the School of Nursing and/or permission of the Dean.

3000. Pharmacology in Nursing. (3). Basic pharmacology of drugs in the major classifications, emphasizing the action of a prototype on organ systems, its mechanisms of action, pharmacokinetics, toxicology and clinically important interactions with other drugs. PREREQUISITES: CHEM 1101, 1102.

3001. Individualized Study. (1-3). Directed individualized approach to increase nursing knowledge, understanding, and skills according to students needs

and level objectives. Assessment of student determines content areas and clinical experience needed. May be repeated for maximum of 6 credit hours. *Credit not applied toward B.S.N. degree.*

3002. Nursing Theories. (2-3). Examination of nursing as a science and profession. Analyzes contemporary models and theories of nursing.

3003. Computers and Nursing. (3). Introduction to history of computers and information systems; emphasis on nursing practice and patient care applications; social, ethical, and legal issues; use and evaluation of software relevant to nursing; beginning programming.

3010. Nursing Care of Children and Adults I. (4). Application of the nursing process with children and adults experiencing common problems of adaptation requiring short-term intervention. Role of the nurse in health promotion and restoration emphasized. Clinical

experiences include direct care to clients of all age groups in secondary care settings. *Two lecture, six clinical/laboratory hours per week.* PREREQUISITE: NURS 2010.

3020. Nursing Care of Children and Adults II. (5). Application of the nursing process with children, adults, and families experiencing problems of adaptation requiring long-term intervention. The nurse's role is expanded to include health maintenance and rehabilitation. Clinical experiences include provision of direct care to clients and their families in secondary care settings. *Two lecture, nine clinical/laboratory hours per week.* PREREQUISITES: NURS 3000, 3101, 3010.

3030. Nursing Care of the Expanding Family. (5). Application of the nursing process with individuals as members of an expanding family. Focuses on promotive and preventive health care. Theory and clinical experiences emphasize assisting the perinatal client

and family with problems of adaptation. Two lecture, nine clinical/laboratory hours per week. PREREQUISITE: NURS 2010.

3040. Nursing Care of Clients with Psychosocial Problems of Adaptation. (5). Application of the nursing process with clients experiencing psychosocial problems of adaptation. Clinical experiences focus on developing the role of the nurse in primary and secondary mental health settings. Two lecture, nine clinical/laboratory hours per week. PREREQUISITE: NURS 2010.

3050. Professional Nursing Perspectives. (5). Emphasis on selected concepts and nursing knowledge to facilitate the transition of registered nurses to the B.S.N. curriculum. Content and clinical experiences validate previous learning and provide a means of progression in the curriculum. Three lecture, six clinical/laboratory hours per week. PREREQUISITE: Admission to the School of Nursing as a Registered Nurse student.

3101. Health Assessment. (3). (3100). Comprehensive health assessment of clients across the life span. Expands interviewing and history taking. Health assessment skills emphasized. Two lecture, three laboratory hours per week. PREREQUISITE: NURS 2010 for basic students.

3102. Clinical Nursing I. (3). (3100). Nursing process in giving primary care to individuals and families in community setting. Emphasis on direct care, wellness, communication, and problem solving skills. Two lecture, two clinical laboratory hours per week. PRE- or CQREQUISITE: NURS 3002, 3101.

3200. Clinical Nursing II. (6). Focusing on nursing process in giving primary and secondary care to individuals and families with chronic health problems

in community settings. Group memberships skills emphasized. Four lecture, four clinical/laboratory hours per week. PREREQUISITE: NURS 3102. PRE- or COREQUISITE: BIOL 3440, NURS 3000.

4000. Clinical Nursing III. (6). Emphasizes conceptual approach in nursing process for clients of all age groups with complex health problems. Clinical experience focuses on developing role of professional nurse in secondary and tertiary health care settings. Four lecture, four clinical laboratory hours per week. PREREQUISITE: NURS 3200. PRE- or CQREQUISITE: NURS 4100, EDRS 4541.

4010. Nursing Care of Children and Adults III. (6). Application of the nursing process with clients, families and groups experiencing complex problems of adaptation. Direct and semidirect role of the professional nurse in a tertiary care setting is emphasized. Three lecture, nine clinical/laboratory hours per week. PREREQUISITES: BIOL 3440, NURS 3020, 3030, 3040.

4020. Nursing and Community Systems. (6). Overview of the community based health care delivery system at the local, state, and national level. Promotes the development of skills which will enable the student to deliver effective nursing care to individuals and groups in a variety of practice settings within the community. Three lecture, nine clinical/laboratory hours per week. PREREQUISITES: BIOL 3440, NURS 3020, 3030, 3040.

4030. Professional Role Synthesis. (6). Promotes integration and synthesis of knowledge and concepts from the discipline of nursing in student selected area of study. Clinical experience focuses on the development of the professional role through application of curriculum concepts, nursing theories and relevant

research. One lecture, fifteen clinical/laboratory hours per week. PREREQUISITES: NURS 4010, 4020.

4100. Nursing Leadership. (3). Theory, research, and practice of leadership roles in nursing groups within health care system; such concepts as communication, status, power motivation, change, conflict resolution, job satisfaction, and decision making in relation to nursing process and practice in groups. Open also to special students with permission of instructor PREREQUISITE: NURS 3200.

4110. Nursing Research. (3). Overview of nursing research. Components of research studied. Focus on critiques of existing studies. Emphasis on interpretation and application of research findings. PREREQUISITES: EDRS 4541 and senior standing.

4200. Clinical Nursing IV. (6). Incorporation of curricular concepts into synthesizing and resocializing process. Student responsible for identifying specific learning objectives in selected area of nursing practice; for demonstrating a professional role change through application of curricular concepts, nursing theories, and relevant research findings within framework through re-evaluation of personal nursing philosophy. Two lecture, eight clinical/laboratory hours per week. PREREQUISITE: NURS 4000. PRE- or COREQUISITE: EDRS 4542.

4300-09. Special Topics in Nursing. (3). Topics are varied and announced in *Schedule of Classes*.

4800. Independent Study. (1-3). Directed study and/or research in selected area of nursing. May be repeated for maximum of 7 semester hours of credit. PREREQUISITE: senior standing and permission of faculty.

The University College

H. RAMSEY FOWLER, A.B., A.M.T., Ph.D., Dean

Room G-1, Johnson Hall

ACADEMIC PROGRAMS

Department	Major	Concentration Within Major	Degree Offered
*	Individual Studies	**	Bachelor of Liberal Studies (B.L.S.) Bachelor of Professional Studies (B.P.S.)
	Legal Assistant		Certificate

* The College is not comprised of departments. Its programs are interdisciplinary and may make use of all departments in the University.

** The student and an advisory committee design contract degrees. Group guidelines are available for the following concentrations: Black Studies, Women's Studies, Alcohol and Drug Abuse Services, Human Services, Health Care Fields, Services for the Aging, Orthotics/Prosthetics and Related Fields, Commercial Aviation, Printing Management, Biomedical Illustration, Aviation Administration, Fire Administration/Fire Prevention Technology, Paralegal Services.

PURPOSE

University College serves special academic needs of adult and other nontraditional students at Memphis State University. It does this by offering students a wide variety of individualized degree opportunities, by its administration of interdisciplinary degree programs, by its oversight of off-campus and tele-instruction, and by its coordination of recruitment and retention services for adults. For faculty across the university, the University College provides the structure to explore and develop interdisciplinary ventures that may later be subsumed into other degree-granting units, in addition to encouraging the development of interdisciplinary courses and promoting the uses of such alternative instructional methods as teamteaching and directed study. Finally University College seeks to

create and maintain a spirit of academic community through careful and concerned advising and interaction outside the classroom among students, faculty, staff, and community professionals. With broad responsibility for nontraditional, interdisciplinary and credit continuing education, University College is Memphis State University's college of lifelong learning.

ORGANIZATION

The University College offers interdisciplinary courses and interdisciplinary and individualized degree opportunities. In addition, it administers units which enhance higher education access for adults, and which provide them support services.

Academic Opportunities are provided through Individualized Programs, Directed-Study Programs and Courses, Bornblum

Judaic Studies, Paralegal Studies, the Open Learning Fire Service Program, Black Studies, and Women's Studies.

Access and Support Units include Extended Programs, the Jackson Center, the Alliance Center, Mini College, and the Pre-Theology and Religious Studies Advisory Committee.

Extended Programs

Through Extended Programs, Memphis State offers courses at sites which are away from the main campus. Through Extended Programs, University College administers one center—in Jackson, Tennessee—and shares the administration of one other—the Higher Education Alliance—in Crump, Tennessee.

Mini College

Mini College provides admission, registration, and other support services for adults, especially for those who have not

attended school or college in many years. Also, at convenient times, it offers sections of regular MSU courses taught by experienced faculty.

Pre-Theology/Religious Studies Advisory Committee

This committee recommends appropriate academic policies and procedure relative to the advising of students with career aspirations in the theological area or the graduate academic study of religion or religious issues. The committee will serve to inform students of different requirements such as languages, natural and social sciences, etc. Dr. Stephen D. Benin, Judaic Studies, is chair and advisor.

ADMINISTRATION

The college is administered by a dean, by the dean's staff, and by the University College Faculty Council, which is made up of twelve members of the faculty of the other degree-granting colleges, plus one representative to the university's General Education Committee. Teachers and advisors come from the traditional departments. These faculty serve University College on a short-term basis, while maintaining their departmental affiliations. Some teaching is done by experienced part-time and adjunct faculty. Advising is provided by Contract/Advising Committees, chaired always by a member of the Memphis State University faculty.

ADMISSION

After an applicant has been admitted to Memphis State University through the Office of Admissions and Records, application for admission to the University College may be made in the Office of the Dean. The University College welcomes inquiries from persons who believe that their interests will be best served by a program which emphasizes personally designed education through contract degrees.

Included in the University College application are a statement of the applicant's educational and career goals and reason for seeking to fulfill them by means of a University College program. Two letters of recommendation and a \$15.00 screening fee must be submitted, as well as descriptions of work experience, interests, and activities related to career goals.

A letter from the Dean of the University College assigns applicants to temporary advisors for screening interviews, the purpose of which is to determine whether the applicants' needs are best met in the University College or elsewhere. If the temporary advisor recommends acceptance and the dean agrees, students

receive letters of acceptance from the dean instructing them to work with their Contract Advising committees on the development of their baccalaureate contracts and reminding them that they must pay \$25.00 contract/advising fees. Contract committees work with students to develop degree programs which serve the students' needs and the academic requirements of the University College of Memphis State University.

Students may transfer into University College more than the ordinary limit of extension, correspondence or armed services courses, provided they are an integral part of the degree program. A minimum of 60 semester hours of the degree program must be received from a four-year institution.

THE UNIVERSITY COLLEGE DEGREES

The Contract Degree

Students enrolling in the University College pursue either of two degrees: the Bachelor of Liberal Studies (BLS) or the Bachelor of Professional Studies (BPS). Both of these degrees must be awarded for programs which are systematic, yet are sufficiently flexible to permit students and advisors to design individual programs of study, i.e., learning contracts.

All contracts will be reviewed and approved by the administration of the University College, but individual contracts will be designed by a Contract/ Advising Committee whose responsibility is to assist the student in the development and execution of a degree program which serves the student's needs and meets the academic requirements of the University College and of Memphis State University. The chairperson and one other committee member must be regular or adjunct members of the Memphis State University Faculty. An additional committee member may be an appropriate student or off-campus resource person. The committee may direct the student in the preparation of a portfolio to obtain credit for knowledge gained through experience or non-traditional instruction; see *Expenses and Aid*, for a description of credit evaluation fees. The Baccalaureate Contract will include work in these major areas: General Education, Coordinated Study, Thematic Studies, Special Project, and Electives.

General Education

The general education program is that part of the undergraduate curriculum that promotes a common background for all baccalaureate candidates. The purpose of the general education program is threefold: to help students develop the skills necessary for completing a college career and for assuming an active role in contemporary society, to give students an awareness

of the diversity of human endeavors in intellectual, creative, social, and technological spheres, and to help students develop analytical and critical faculties that can be applied across the issues confronting them in the modern world. Above all, the general education program should make available to the student the tools and awareness necessary for active, lifelong learning and for active, literate participation in society.

Thematic Studies

Thematic Studies cross departmental and disciplinary lines to examine a theme, problem, issue, or epoch from several points of view. As upper-division courses, they are designed to provide ways for undergraduates to integrate the full scope of their studies more effectively than they are able to do within the traditional departmental structure. Thematic Studies do, however, require the special knowledge and expertise learned from and fostered by the traditional disciplines. All students will complete a minimum of six semester hours of thematic studies courses.

Coordinated Study

The Individualized Study component of the program includes a Coordinated Study Program of at least 30 upper-division hours in at least two academic disciplines, plus a special synthesizing project (9 semester hours). Credit may be earned through courses offered by departments in the other degree-granting colleges, credit by examination, credit for experiential learning, transfer credit, internships or apprenticeships, independent studies, additional Thematic Studies courses, and the Special Project. For a University College student, the Coordinated Study Program corresponds to a departmental major. Students must earn a C or above in each graded course.

The Special Project

The Special Project will be designed as a synthesizing activity, interdisciplinary in nature, by which the student demonstrates in a sustained manner comprehension and command of the complex skills and understanding encompassed in the coordinated study program. The Special Project carries 9 semester hours credit. Students must earn at least a grade of C on their Special Projects.

Electives

Students are encouraged to select electives so as to support their coordinated study programs.

Computer Literacy

This requirement can be satisfied by taking one of the following courses or course combinations: COMP 1200; ISDS 2750; ACCT 2410; ART 3225; ART 4222; JOUR 2121; JOUR 3900; EDUC 3600; CIVL 1107 and CIVL 3101; ELEC 1206 and

ELEC 1207; MECH 1307 and MECH 3341; TECH 1010 or 1210 and 2010 or 3233, NURS 3003.

DEGREE REQUIREMENTS

GENERAL EDUCATION SEMESTER HOURS

Basic College Skills [12-15 hrs]

Communication [9 hrs]

ENGL 1101	English Composition	(3)
ENGL 1102	English Composition and Analysis	(3)
COMM 2381	Oral Communication	(3)

Mathematics [3-6 hrs]

MATH 1181-1182	Concepts of Number/ Concepts of Algebra	(6)
MATH 1312	Elementary Calculus	(3)
MATH 1321	Analytic Geometry and Calculus	(4)
MATH 2000	Experiences in Mathematics	(3)

Human Studies [12 hrs]

World Heritage

1. Literary Heritage [3 hrs]

ENGL 2201	Literary Heritage	(3)
-----------	-------------------	-----

2. Fine Arts Heritage [3 hrs]

ART 1101	Introduction to Art	(3)
COMM 1851	Introduction to Film	(3)
DANC 1151	Introduction to Dance	(3)
MUHL 1101	Music Appreciation	(3)

3. Historical/Philosophical Heritage (pre-1500) [3 hrs]

CLAS 2481	Mythology	(3)
HIST 1301	Development of World Civilization I	(3)
PHIL 1101	Classical Issues in Philosophy	(3)
POLS 1101	Introduction to Ancient Political Thought	(3)

UNIV 2850	Religions of Abraham: Judaism, Christianity, Islam (See UN-003)	(3)
UNIV 3580	Hebrew and Greek Legacy	(3)

4. Historical/Philosophical Heritage (post-1500) [3 hrs]

HIST 1302	Development of World Civilization II	(3)
PHIL 1102	Values and the Modern World	(3)
POLS 1102	Introduction to Modern Political Thought	(3)

UNIV 3581	Faith, Reason, and Imagination	(3)
-----------	--------------------------------	-----

Social Institutions/Social Science [6 hrs]

This requirement can be fulfilled either by taking one course from group 1 and one course from group 2, or by taking two courses from group 2.

Group 1

ANTH 1100	Human Origins and Variations	(3)
CJUS 1100	Introduction to Criminal Justice	(3)
ECON 2120	Introduction to Microeconomics	(3)
POLS 1100	American Government	(3)
PSYC 1101	General Psychology	(3)
SOCI 1111	Introduction to Sociology	(3)

Group 2

ANTH 2100	Cultural Anthropology	(3)
CJUS 2100	Comparative Criminal Justice Systems	(3)
ECON 2110	Introduction to Macroeconomics	(3)
GEOG 1301	Survey of World Regions	(3)
GEOG 1401	Introduction to Cultural Geography	(3)
POLS 2301	Comparative Politics	(3)
POLS 2501	International Politics	(3)
PSYC 2201	Deviance: Its Role in History and Culture	(3)
SOCI 2100	Sociology of International Development	(3)
SOCI/HMEC 2101	The Family in Global Perspective	(3)
UNIV 2304	Gender and Society	(3)

Natural Sciences [8 hrs]

Choose one of the following sequences:

BIOL 1101-1102	Biology: A Human Perspective	(8)
BIOL 1111-1112	General Biology	(8)
CHEM 1101-1102	College Chemistry	(8)
CHEM 1131, 1121, 1132, 1122		(8)
GEOG 1101-1102	Introduction to Earth Science	(8)
GEOG 1101-1102	Physical and Historical Geology	(8)
GEOG 1101/GEOG 1101		(8)
PHYS 1101-1102	Introduction to Physics and Astronomy	(8)
PHYS 2511-2512	Physics for Science and Engineering	(8)
UNIV 1610-1611	Natural Science	(8)

Fitness and Wellness [4 hrs]

HPER 1100	Concepts of Fitness and Wellness	(2)
-----------	----------------------------------	-----

In addition, students must take physical activity course(s) from the approved list.

(2)

Writing Intensive Requirement [3 hrs]*****

One course from the approved list.

Computation Intensive Requirement [3 hrs]*****

One course from the approved list.

Integration Requirement [3 hrs]*****

All students must take at least three semester hours from integrative courses approved for General Education.

*****In certain instances, courses which fulfill other general education requirements, and/or which are used in the Coordinated Study Program, may fulfill these requirements as well.

THEMATIC STUDIES [6 hrs]

All students must take six semester hours of courses chosen from the following:

UNIV 3500-3599	Thematic Studies	(3-6)
UNIV 4500-4599	Advanced Thematic Studies	(3-6)

COORDINATED STUDY [30 hrs]

Students must complete a minimum of 30 upper division hours from two or more departments.

SPECIAL PROJECT [9 hrs]

UNIV 4996	Special Project	(9)
-----------	-----------------	-----

COMPUTER LITERACY [varies]

ELECTIVES [vary]

Total 132 hrs

GROUP CONTRACTS

Bachelor of Liberal Studies

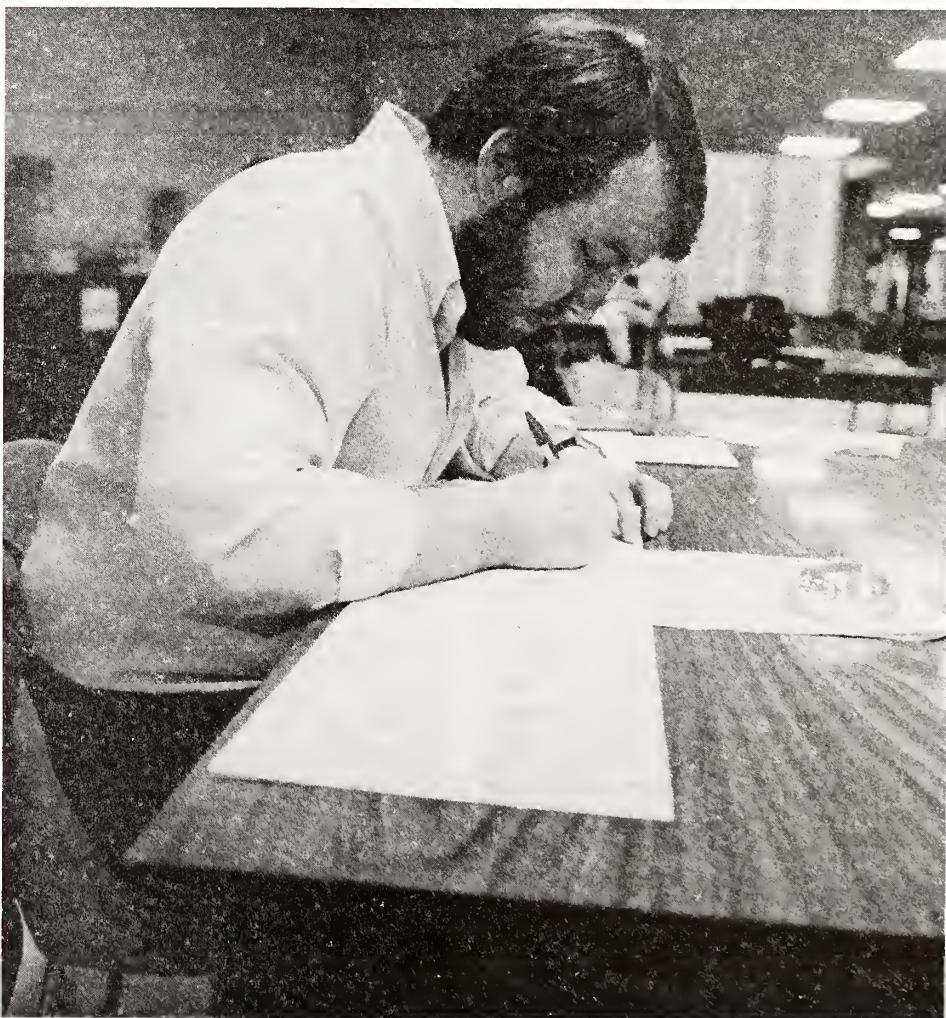
Black Studies

Black Studies re-examines history, society and the arts from a different perspective, giving recognition to the achievements of Black Americans and directing scholarship toward the totality of Black experience. In addition, it offers all students an intellectual framework for discerning and dealing with racism; informs and awakens all students to the cultural heritage of Black Americans to promote improved self-understanding regardless of race, and it provides Black students with positive models of leadership, personal development and social commitment.

Advising Clusters

As a service to students interested in Black Studies, the following groups of courses have been identified for students who wish to select a cohesive group of electives to support major programs of study or other academic goals.

Though these are not formal programs of study, students are advised to complete at least three courses in any single group.



in order to experience depth of knowledge and understanding in a given area.

Race Relations and Interracial Communication: This group of courses has been identified as supportive of the programs of those students who may wish to teach in the schools; work as counselors, therapists, or social workers; be active with community and/or social service agencies; undertake business ventures in minority areas or with minority clients; prepare for careers as attorneys; etc.

COMM 2361	Black Rhetoric
COMM 4373	Interracial Communication
SOCI 3401	Social Inequality
SOCI 3420	Sociology of the South
SOCI 3422	Racial and Ethnic Minorities: A Socio-Historical Approach
SOCI 4420	Race Relations

Backgrounds and Historical Development: Students completing this group may wish to pursue anthropological and/or historical study; to examine relationships between art forms and cultural development; to understand their own history in relation to African cultures; to gain backgrounds to the humanistic study of economic development; to pursue careers in international studies, etc.

ANTH 3242	Peoples of Africa
ANTH 3342	Archaeology of Africa
HIST 4881	Black American History
SOCI 4460	Black and White Women of the South

Cultural Forms and Expressions: This group has been identified for those students having a strong interest in literary, art and/or musical history; who are or will wish to become writers, artists, or musicians; who are students of cultural history, etc.

ANTH 3342	Archeology of Africa
COMM 2361	African American Rhetoric
ENGL 4371	African American Literature
MUHL 4802	Studies in American Folk and Popular Music

Social and Political Problems: Students completing this group may be students of modern American history; may wish to study and/or deal with contemporary social and political problems; may look ahead to administrative or legal careers, working with minorities and majority/minority issues; may wish to prepare for careers in politics, etc.

HIST 4881	Black American History
POLS 4212	Constitutional Law: Civil Liberties
SOCI 3401	Social Inequality
SOCI 4420	Race Relations
SOCI 4460	Black and White Women of the South

Women's Studies

Women's Studies at Memphis State University is an interdisciplinary academic field which encompasses women's history, their work, their literature, their roles, and their status in diverse classes, cultures, and societies. Focusing on the study of gender across the curriculum, Women's Studies reexamines and provides a critical context for the basic assumptions and theories on which traditional academic disciplines rest.

Bachelor of Professional Studies

Alcohol and Drug Abuse Services

Students in Alcohol and Drug Abuse Services will develop contracts in one of these areas: Therapeutic Services, Social and Public Services, or Administrative Services. All will take a core of courses in alcohol and drug abuse, social, and administrative services, and will complete their contracts by taking courses relevant to their concentrations. All students must have on-the-job experience, evaluated through internships, portfolio assessment, or both.

Aviation Administration

Students in Aviation Administration study in one of these three areas: Business and Management, Public Administration, or Computer and Information Systems. In addition, thirty-four semester hours of

academic credit are available for completion of three categories of FAA journeyman level instruction: Airport Traffic Control Tower, Air Route Control Center, and Flight Service Station. Credit by individual course is granted for Airways Facilities Journeyman and for instruction in all four categories beyond the journeyman level.

Biomedical Illustration

Students in Biomedical Illustration will take a common core of courses in art, photography, chemistry, and the life sciences. Students in Pre-Medical Illustration will also study figure structure, perspective, drawing, sculpture, medical illustration, etc. Students in Biomedical Photography will take further courses in photography, photographic materials and processes, biomedical photography, etc. Students in both Pre-Medical Illustration and in Biomedical Photography will complete internships in at least one setting in the Memphis area.

Commercial Aviation

Students in Commercial Aviation will develop contracts in general management, personnel and industrial relations, publicity and public relations, technological or computer systems, and the like, modeled upon the Airway Science Curriculum of the FAA or others.

Fire Administration and Fire Prevention Technology

University College is the regional center for the Open Learning Fire Service Program, serving fire service personnel in Tennessee, Kentucky, Arkansas, Mississippi, Alabama, South Carolina, and Georgia. OLFSP is a degree-completion program, offering upper division courses in Fire Administration and Fire Prevention Technology. These courses are designed for independent study. Freshman and sophomore courses, electives, and other courses related to the fire service are taken at a college near the student's residence.

CORE COURSES

POLS 3613	Advanced Fire Administration
TECH 3940	Analytic Approaches to Public Fire Protection
POLS 3612	Fire Prevention Organization and Management
TECH 3944	Fire Protection Structure and Systems Design
POLS 3615	The Community and the Fire Threat
POLS 3614	Political and Legal Foundations of Fire Protection

FIRE ADMINISTRATION CONCENTRATION

POLS 3610	Personnel Management for the Fire Service
POLS 3611	Disaster and Fire Defense Planning
TECH 3947	Applications of Fire Research

FIRE PREVENTION TECHNOLOGY CONCENTRATION

TECH 3942	Fire Related Human Factors
TECH 3945	Incendiary Fire Analysis and Investigation
TECH 3946	Fire Dynamics

Health Care Fields

Students studying in one of the Health Care Fields will take a core of courses selected from such areas as Human Growth and Development, Psychology of Personality, Social Psychology, Public Administration, Organization and Management, or Medical Sociology. Students

interested in Health Care Administration will then take courses in administration and sound business practices. Students in Community Health will take courses in public policy, community action, urban society, federal, state, and local government, etc.

Human Services

Students in Human Services will be expected to develop a philosophical orientation to the human condition; to enlarge their understanding of social structures, values and norms; to study human growth and development; and to become informed about social change and social and bureaucratic organization. Students in Human Services will take courses from such departments as Counseling and Personnel Services, Sociology and Social Work, Psychology, Management, and Special Education and Rehabilitation.

Orthotics/Prosthetics and Related Fields

This degree is offered in cooperation with Shelby State Community College. Entering students will normally have completed an Associate of Applied Science Degree in Orthotics and/or Prosthetics before being admitted to this baccalaureate program. Once in it, however, students will develop contracts in one of these areas: Patient Rehabilitation, Business Management, or Engineering Technology.

Paralegal Services

Students using the guidelines for Paralegal Services will wish to be employed or retained by a lawyer, law office, governmental agency, or other entity. By following the guidelines, students will have the opportunity to learn a wide range of law-related activities that stress legal principles, procedures, and ethical considerations in addition to other skills designed to enhance their ability to represent their employers and to work with clients in professional and supportive ways.

Printing Management

This program is designed for printers who wish to become more effective managers and supervisors, to enable them to interact at a professional level with others who have received systematic managerial and supervisory training. They may wish to manage their own businesses, become managers in printing firms, or serve as in-plant printing managers for corporations, organizations, or institutions.

Services for the Aging

Students in Services for the Aging will take a core of courses in gerontology, adult development, and social policy for the aging. In addition, they will enroll in such other courses as will prepare them to become counselors, managers, teachers, activity directors, family life workers, personnel supervisors, and the like.

Women's Studies

Women's Studies at Memphis State University is an interdisciplinary academic field which encompasses women's history, their work, their literature, their roles, and their status in diverse classes, cultures, and societies. Focusing on the study of gender across the curriculum, Women's Studies reexamines and provides a critical context for the basic assumptions and theories on which traditional academic disciplines rest.

BORNBLUM JUDAIC STUDIES

Bornblum Judaic Studies explores the experience of the Jewish people within the contexts of world cultures. Non-theological in its orientation, it provides students the opportunity to study related areas, including the history of the Jewish people, structures and politics of Jewish communities, the Hebrew and Arabic languages, and the religious, intellectual, and aesthetic traditions of the Jewish people. Courses offered for Bornblum Judaic Studies are open to all students. Students may wish to complete the entire curriculum or only a part of it. All interested students should contact the Judaic Studies Director.

CURRICULUM

SEMESTER HOURS
(minimum of 24)

A. Required Language [12 hrs]

LANG 1701	Special Studies in Foreign Languages (Hebrew)	(3)
LANG 1702	Special Studies in Foreign Languages (Hebrew)	(3)
LANG 2701	Special Studies in Foreign Languages (Hebrew)	(3)
LANG 2702	Special Studies in Foreign Languages (Hebrew)	(3)

B. Elective Courses [12 hrs]

1. Select two or three courses from the following:	
HIST 3275	History of the Jewish People
UNIV 2850	Introduction to Ancient Near Eastern Religions
UNIV 3801	Jewish Thought
UNIV 4801	Jewish Mysticism and Reason
2. Select at least one course from the following:	
ART 4121	Ancient Art of the Near East
ENGL 4461	The Bible as Literature
HIST 3271	The Middle East
UNIV 4830	The Politics of Israel

With the signed approval of the Director of Bornblum Judaic Studies, students may substitute one course not listed under B.2. In a given semester, a substituted course will be taught with substantial Judaic content, and student will be permitted to do papers, projects, or other independent work on Judaic subjects.

Recommended

The following course is recommended as a supplement to the Judaic Studies curriculum:

LANG 1701	Special Studies in Foreign Languages (Arabic)	(3)
-----------	---	-----

LEGAL ASSISTANT CERTIFICATE

Paralegal Studies offers rigorous high quality law-related academic courses for individuals pursuing career opportunities in

a law office, government agency, or other organization. Such individuals will wish to obtain legal skills and to work under the supervision of a lawyer or be otherwise authorized by law to use these skills. To attain them, it is required that students be able to read critically, think logically, and write clearly—attributes required of persons in the legal profession.

To earn a **Legal Assistant Certificate** a student must complete a minimum of 60 semester hours, as follows:

These 21 semester hours:

ENGL 1101	English Composition	(3)
ENGL 1102	English Composition and Analysis	(3)
ACCT 2010	Fundamentals of Accounting I	(3)
ACCT 2020	Fundamentals of Accounting II	(3)
COMM 2381	Oral Communication	(3)
HIST 2601	The United States to 1877	(3)
HIST 2602	The United States Since 1877	(3)

Three semester hours from the following:

PSYC 1101	General Psychology I	(3)
SOCI 1111	Introductory Sociology	(3)
POLS 1100	American Government	(3)

Three semester hours from the following:

ART 1101	Introduction to Art	(3)
MUHL 1101	Music Appreciation	(3)
THEA 1551	Introduction to Theatre	(3)
HIST 1301	The Development of World Civilization I	(3)
HIST 1302	The Development of World Civilization II	(3)
PHIL 1101	Classical Issues in Philosophy	(3)

Students may also elect one semester of a foreign language.

These 18 semester hours:

UNIV 2210	Introduction to Law	(3)
UNIV 2211	Law Office Management	(3)
UNIV 2212	Legal and Office Applications of Accounting	(3)
UNIV 2213	Legal Research and Writing I	(3)
UNIV 2214	Legal Research and Writing II	(3)
UNIV 2215	Tennessee Courts and Procedures	(3)

Fifteen semester hours from the following:

UNIV 2216	Family Law	(3)
UNIV 2219	Corporations	(3)
UNIV 3217	Investigation	(3)
UNIV 3218	Contracts	(3)
UNIV 3219	Labor Law for Paralegals	(3)
UNIV 3220	Litigation and Evidence	(3)
FIR 3310	Real Estate Principles	(3)
FIR 4011	Estate Planning and the Law of Taxation	(3)
FIR 4310	Real Estate Law	(3)

In addition, students may work on the development of individualized baccalaureate contracts in **Paralegal Studies**, leading to the Bachelor of Professional Studies degree. The legal assistant certificate program must be completed as part of a baccalaureate contract in this area.

MINORS

Black Studies

The Minor: 18 semester hours, with courses chosen as follows:

Group 1 (six semester hours) Choose two of the following:

COMM 2361	African American Rhetoric	(3)
COMM 4373	Interracial Communication	(3)
SOCI 4420	Race Relations	(3)

Group 2 (three semester hours) Choose one of the following:

ANTH 3242	Peoples of Africa	(3)
ANTH 3342	Archaeology of Africa	(3)

Group 3 (three semester hours) Choose one of the following:

SOCI 3401	Social Inequality	(3)
SOCI 3420	Sociology of the South	(3)
SOCI 3422	Racial and Ethnic Minorities: A Socio-Historical Approach	(3)

Group 4 (six semester hours) Choose two of the following:

ENGL 4371	African American Literature	(3)
HIST 4881	Black American History	(3)
MUHL 4802	Studies in American Folk and Popular Music	(3)
POLS 4212	Constitutional Law: Civil Liberties	(3)

With the signed approval of the Dean of the University College, students may substitute up to two courses for those listed above. Substituted courses will have substantial Black Studies content, and students will be allowed to do papers, projects, or other independent work on Black Studies issues.

Judaic Studies

The minor in Judaic Studies is open to students majoring in any department in the university, in addition to special students who wish to enroll in order to take this program.

The minor: 18 semester hours of required courses and electives

A. REQUIRED LANGUAGE [6 HOURS]

LANG 1701	Special Studies in Foreign Languages (Hebrew)	(3)
LANG 1702	Special Studies in Foreign Languages (Hebrew)	(3)
LANG 2701	Special Studies in Foreign Languages (Hebrew)	(3)
LANG 2702	Special Studies in Foreign Languages (Hebrew)	(3)

B. ELECTIVE COURSES [12 HOURS]

1. Select two or three from the following:	
UNIV 2850	Religions of Abraham: Judaism, Christianity, Islam
UNIV 4801	Jewish Mysticism and Reason
HIST 3275	History of the Jewish People
UNIV 3801	Jewish Thought
2. Select at least one from the following:	
ART 4121	Ancient Art of the Near East
ENGL 4461	The Bible as Literature
HIST 3271	The Middle East
UNIV 4830	The Politics of Israel

C. With the signed approval of the Director of Bornblum Judaic Studies, students may substitute one course not listed under B.2. In a given semester, a substituted course will be taught with substantial Judaic content, and students will be permitted to do papers, projects, or other independent work on Judaic subjects.

Legal Thought and Liberal Arts

The minor, Legal Thought and Liberal Arts, is designed to provide a liberal arts program for students who intend to enter the legal profession and will be of particular benefit to pre-law students whose majors are more professional in nature and who are not exposed to the broader liberal arts curriculum. Students will be introduced to major intellectual traditions of the West and to ethical, social, and economic issues of significance to our time. The courses in the minor require that the students read critically, think logically, and write clearly— attributes required of persons in the legal profession.

The Minor: 18 semester hours of required courses and electives.

A. Required Core Courses:

PHIL 1611	Elementary Logic
-----------	------------------

One of the following:

ENGL 3604	Intermediate Composition
ENGL 4231	Chaucer
ENGL 4232	Shakespeare's Tragedies
ENGL 4233	Shakespeare's Comedies and Histories
ENGL 4234	Milton

B. Electives: select one course from each of the following groups

1. Historical Context of the Law	
HIST 3121	England Before 1714
HIST 3506	Cultural & Intellectual History of Europe
HIST 3840	United States Constitutional History
2. Economic Context of the Law	
ECON 2110	Introduction to Macroeconomics
ECON 2120	Introduction to Microeconomics
ECON 4040	Economic Foundations of Legal Issues
3. Theoretical Foundations of Jurisprudence	
PHIL 3511	Ethics
PHIL 4531	Philosophy of Law
PHIL 4551	Social and Political Philosophy
POLS 3401	Legal/Political Thought: Classical
POLS 3402	Legal/Political Thought: Modern
POLS 3405	Introduction to Law & Jurisprudence

4. Practical Foundations of Jurisprudence

CJUS 3510	Law and Society
POLS 4212	Constitutional Law: Civil Liberties
POLS 4215	Constitutional Policies & the Judicial Process
POLS 4405	Origin and Development of American Political Thought

Students wishing to minor in Legal Thought and Liberal Arts should contact the pre-law advisor.

Religion in Society

The University College offers an interdisciplinary minor in Religion in Society. This minor examines the role of religion in society as seen from the perspectives of culture and social organization; of history and philosophy; of art and music. The minor is open to students majoring in any area in any of the undergraduate colleges or to special students who wish to enroll in order to take such a program.

The Minor: 18 semester hours of core courses and electives.

A. Required Core Courses

PHIL 3701	God and Man
ANTH 4253	Anthropology of Religion
SOCI 3860	Sociology of Religion

B. Additional Courses (select one course each from any three of the following four groups of courses):

Group 1

ANTH 3351	Archaeology of Europe and Asia
POLS 3102	Religion and Politics
UNIV 4830	The Politics of Israel

Group 2

PHIL 3411	Contemporary Moral Problems
PHIL 3511	Ethics

PHIL 3711	Philosophy of Religion
PHIL 3721	Oriental Philosophy
UNIV 3801	Jewish Thought
UNIV 4801	Jewish Mysticism and Reason
<i>Group 3</i>	
HIST 3021	History of the Christian Church
HIST 3275	History of Jewish People
HIST 3290	Traditional Asia
HIST 4361	History of the Byzantine Empire
HIST 4371	Early Middle Ages
HIST 4372	High Middle Ages
HIST 4390	Europe — Age of Reformation
<i>Group 4</i>	
ART 4121	Ancient Art of the Near East
ART 4142	Northern Renaissance Art
ART 4146	Baroque Art
ART 4181	Primitive Art
ART 4131	Early Christian and Byzantine Art
ART 4134	Romanesque and Gothic Art
MUSA 4104	Sacred Music in History & Practice I
MUSA 4105	Sacred Music in History & Practice II
MUSA 4801	Studies in Sacred Music
ENGL 4461	Bible as Literature

Women's Studies

The Minor: 18 semester hours, including 6 hours from core courses and 12 hours of electives.

A. Core Courses (Choose 2)

UNIV 2304	Gender and Society
UNIV 4304	Studies in Feminism
HIST 4851	History of Women in America

B. Electives (Choose 4)

ANTH 3511	Culture, Kin, and Family
ANTH 4551	Culture and Childbirth
COMM 4856	Women and Film
ENGL 4451	Studies in Women and Literature
HIST 4831	History of American Family
SOCI 3432	Sociology of Gender Roles

SOCI 4420	Sociology of Poverty
SOCI 4460	Black and White Women in the South

With the signed permission of the Director of Women's Studies, students may substitute up to two courses which focus on Women's Studies issues for those listed under B, above. Substituted courses will be taught with substantial Women's Studies content, and students will be permitted to do papers, projects, or other independent work on Women's Studies issues.

EVALUATION

All members of the Contract/Advising Committee evaluate the student's performance, recognizing that each student enrolled in the University College must meet all University credit-hour and QPA requirements. The following methods are used to evaluate a student's performance: the traditional grading systems, Satisfactory/Unsatisfactory and Credit/No Credit options supplemented by written narrative evaluations, credit or placement by examination, Advanced Placement examinations for degree credit where these are available, and credit for validated learning from experience or non-traditional instruction.

University College Course Descriptions

The following courses are open to students enrolled in the University College. Others may enroll with the permission of the Dean of the College.

The specific content of Liberal Studies and Thematic Studies courses will vary from semester to semester; general course descriptions are presented here.

R950 LIBERAL STUDIES (UNIV)

1010-1019. Communication I. (3-6). Exercises in critical listening and interpretation and in effective writing and speaking based on rhetorical analyses of selected documents (e.g. essays, documentary films, narrative plays, poems, speeches, etc.).

1020-1029. Communication II. (3-6). Research into and critical interpretation of those media which create environment of symbols and of effects of such environments on human belief and action; for example, writing in periodical and book form, radio, television, film, recorded music and systems of electronic communication. Individual research into symbols used for communication and environment(s) these symbols produce. PREREQUISITES: UNIV 1010 or ENGL 1101 and ENGL 1102 or their equivalents.

1210-1219. Humanities. (3-6). Research into and critical interpretation of major documents and symbols of Western civilization; emphasis on man's attempt, in philosophy, religion, history, literature, and fine arts, to frame coherent place for himself in world. One or two historical periods stressed.

1410-1419. Social Science. (3-6). Introduction to fundamental concepts used by disciplines of anthropology, economics, political science, geography, psychology and sociology. Emphasis on understanding human behavior through study of culture, society and its institutions, personality and mental processes, allocation of resources, and distribution of power. Students encouraged to develop a social science perspective on human behavior through study of important research findings and research of their own.

1610. Natural Science I. (4). Development of universe; origin of elements and species; development of natural laws and their influence on cultural development of

humankind. Potentials and limitations of science explored. *Three lecture, two laboratory hours per week. [G].*

1611. Natural Science II. (4). Concept of origin of universe and development of scientific thought; ways in which scientists develop knowledge of distant past; degrees of certainty possible to scientific investigation. Possible conflicts between scientific thinking and human institutions explored. *Three lecture, two laboratory hours per week. [G].*

1612-1619. Natural Science. (4). Basic processes of physical and natural science as applied to selected areas of biology, chemistry, geography, geology, and physics. Formulations of models and use of inductive reasoning in study of physical phenomena used to illustrate interrelationships among natural science disciplines. Laboratory work included.

1810-1819. Leisure and Recreation. (4). Relationship between leisure, recreation, and work; emphasis on balanced lifestyle. Opportunities to participate in and demonstrate selected recreational skills and activities.

R950 THEMATIC STUDIES (UNIV)

3500-3599. Thematic Studies. (3-9). Interdisciplinary seminars about significant problems, themes, or ideas. Specific course descriptions each semester in "Addenda" section of *Schedule of Classes*.

3509. Connections. (3). [W].

3527. Making the Humane City. (3). [W].

3529. Character and Society in Contemporary America. (3). [W].

3580. Hebrew and Greek Legacy. (3). Interdisciplinary examination of salient ideas, values, and traditions of ancient Hebraic and Greek cultures, with emphasis on those ideas and values which have most significantly influenced the modern world. Understanding of ideas and values enhanced through comparison with selected non-Western traditions. *[G].*

3581. Faith, Reason, and Imagination. (3). Interdisciplinary examination of religious, rationalist, and aesthetic viewpoints as distinctive ways of understanding what is fundamental to human experience.

Exploration of historical development of each of these modes of understanding and examination of tensions that exist among them in modern world. *[G].*

4500-4599. Advanced Thematic Studies. (6-9). Advanced interdisciplinary seminars about significant problems, themes, or ideas. Specific course descriptions each semester in "Addenda" section of *Schedule of Classes*.

R950 INDIVIDUALIZED STUDIES (UNIV)

1005. Directed Study. (1-3). Directed study at introductory level. Student may seek permission to study under faculty direction in an area not routinely taught. This course may be repeated for maximum credit of six hours. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts.

2110. Field Experience. (1-6). Supervised on-site training in basic skills. May be repeated up to a maximum of 6 hours. PREREQUISITE: Approval of Out-of-Class Learning and Baccalaureate Contracts.

2210. Introduction to Law. (3). (ADOS, OFAD). Nature and process of law for the legal assistant. Includes such areas as functions of attorney, development of law, overview of system's justice and legal institutions, and survey of scope of law.

2211. Law Office Management. (3). (ADOS, OFAD). Basic principles of management and necessary techniques and systems for efficient law office operation.

2212. Legal and Office Applications of Accounting. (3). (ADOS, OFAD). Review of accounting theory. Emphasis on application of accounting principles to operation of a law office. PREREQUISITES: ACCT 2010, 2020.

2213. Legal Research and Writing I. (3). (ADOS, OFAD). Emphasis on analysis and research of legal problems, interpretation of legal decisions and statutory materials, and communication of facts and ideas.

2214. Legal Research and Writing II. (3). (ADOS, OFAD). State rules of practice and procedure. Emphasis on drafting pleadings, motions, memoranda of law, and appellate briefs. The Code of Professional

Responsibility examined through class discussion and hypothetical cases. PREREQUISITE: UNIV 2213.

2215. Tennessee Courts and Procedure. (3). (ADOS, OFAD). Introduction to court structure and to Tennessee Rules of Civil Procedure which govern the system. PREREQUISITE: UNIV 2210.

2216. Family Law. (3). (ADOS, OFAD). Domestic relations course for the paralegal. Substantive and procedural law in family law. Includes marriage, women's rights, minor's disabilities, annulment, child custody, and adoption. Primary emphasis on Tennessee statutes and case law.

2219. Corporations. (3). (ADOS, OFAD). Major types of business organizations; formation and structure of corporations; drafting of corporate documents, including articles of incorporation and bylaws, stock certificates, resolutions, employment agreements, acquisitions and mergers, closing papers.

2304. Gender and Society. (3). Sources, development, and effect of gender hierarchy on self-concept, quality of life, and ability to effect social change; subordination of women of different classes, races, and ethnicities across nationalities, cultures, and centuries; symbol, myth, and psychology in human development and gender divisions of power within historical struggle for control of world's wealth. [G].

2850. Religions of Abraham: Judaism, Christianity, Islam. (3). Survey of development of several Near Eastern religious traditions; consideration of intellectual relationships among them. [G].

3217. Investigation. (3). (ADOS, OFAD). Legal assistant's role in gathering basic facts, interviewing key witnesses, searching documents, and preserving facts and evidence gathered for trial. Problems of confidentiality and of formal and informal cooperation with opposing counsel.

3218. Contracts. (3). (ADOS, OFAD). General survey of contract law, definitions and classifications of contracts, capacity of parties, legal effect of offer acceptance and consideration. Introduction to provisions of Uniform Commercial Code.

3219. Labor Law for Paralegals. (3). (ADOS, OFAD). History of labor and statutory basis for American law. Grievance and arbitration, employment discrimination, and workers compensation included.

3220. Litigation and Evidence. (3). (ADOS, OFAD). In-depth coverage of civil litigation in state and federal courts from client interview and jury selection through appeals and rules of evidence with regard to witnesses and exhibits. State court practice based upon Tennessee Code of Civil Procedure but with view toward adaptability to other states.

3300. Medical Illustration Techniques I. (3). Special techniques used by illustrators working in medical settings.

3301. Medical Illustration Techniques II. (3). Further instruction in special techniques used by illustrators working in medical settings. Work with case problems.

3302. Biomedical Photography. (3). Special techniques used by photographers working in medical settings.

3700-3709. Special Topics. (3-6). Examination of selected topics announced in *Schedule of Classes*.

3801. Jewish Thought. (3). Analysis and critical evaluation of major ideas representative of Jewish intellectual traditions. Focus upon theological and philosophical issues. With different content, may be repeated once.

4110. Internship. (3-6). Supervised training in work related to student's educational objectives. May be repeated to maximum of 12 hours. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts.

4304. Studies in Feminism. (3). Analysis and application of feminist theory across disciplines; emphasis upon development of feminist philosophies and impact upon traditional methodologies and fields of study.

4380. Independent Study. (1-3). Directed individual study or research. Student who has identified area of

study pertinent to his coordinated study program, but not routinely taught, may pursue the study under direction of faculty member. May be repeated to maximum of 6 hours. PREREQUISITE: approval of Out-of-Class Learning and Baccalaureate Contracts.

4700-09. Advanced Special Topics. (3-6). Advanced examination of selected topics announced in *Schedule of Classes*.

4801. Jewish Mysticism and Reason. (3). Survey of Jewish mystical thought, its history, leading personalities, major concepts and seminal texts; relationship to normative Judaism and Jewish philosophy.

4830. The Politics of Israel. (3). Study of the Israeli political process.

4996. Special Project. (9). Academic research or other creative activity resulting in tangible product to demonstrate synthesis of student's Coordinated Study. PREREQUISITE: Completion of a Thematic Studies course (UNIV 35 and/or 45-). Students will receive an in-progress grade or a letter grade. PREREQUISITE: approval of Special Project and Baccalaureate Contracts.

R950 EXPERIENTIAL LEARNING (UNIV)

A portfolio describing and documenting knowledge gained through experience or non-traditional instruction may be prepared by a University College student for assessment by a faculty member. (See *Expenses and Aid* and *Academic Regulations* sections for more details.) That faculty assessor recommends the descriptive title, level, and amount of credit to be assigned by the dean of University College.

1900-1999. Introductory Level Experiential Learning in (descriptive title).

2900-2999. Intermediate Level Experiential Learning in (descriptive title).

3900-3999. Advanced Level Experiential Learning in (descriptive title).

Independent Departments and Programs

JOHN R. DILL, B.S., M.A., PH.D.

Associate Vice President for Academic Affairs

Room 319, Administration Building

Independent departments and programs are those which are not affiliated with a particular college in the university. The undergraduate independent departments or programs are Aerospace Studies (AFROTC), International Studies, Military Science (Army ROTC), Naval Science, and University Honors Program. Because they are not part of a particular college, there is no dean; therefore, an Associate Vice President for Academic Affairs performs the duties of a dean for most of these areas and for students enrolled in these programs.

of the University's teaching, research and service activities in the international field.

This office is responsible for the conduct of Memphis State sponsored overseas study and work programs as well as for those through membership in consortia such as the cooperative British Studies Program in London with the University of Southern Mississippi. Current information on these programs and study abroad opportunities sponsored by other colleges and universities open to MSU students is available for reference in this office. Students will be assisted in selecting programs which will best serve their educational needs. Participation in study and work abroad programs is not limited to those enrolled in international studies programs, but is open to all qualified persons.

Through membership in the International Student Exchange Program (ISEP), undergraduate students have access to exchange opportunities with universities in many countries of the world. There are also other exchange opportunities sponsored by

governmental and private organizations. Advanced graduate students engaged in foreign area and international research and study may obtain information about grant opportunities that may be available to them.

The Office of International Studies is also prepared to assist students who are interested in participating in overseas exchange programs sponsored by governmental and private organizations. Advanced graduate students engaged in foreign area and international research and study may obtain information about grant opportunities that may be available to them. In cooperation with the Office of Sponsored Programs, the Office of International Studies will give advice and assistance to those interested in applying for financial aid from non-university sources.

The office has responsibilities in a broad range of other international programs in which the university is currently engaged or is prepared to engage. Among these activities are the following: development and administration of interinstitutional consortia in the fields of international

INTERNATIONAL STUDIES

ASSOCIATE PROFESSOR

JAMES K. MUSKELLEY, Director

Office of International Studies,
Winfield Dunn Building 300

The Office of International Studies coordinates and assists in the development

studies and programs, including overseas development and technical assistance; the offering of non-credit courses, orientation seminars and training programs for businesses and other organizations with international interests; maintenance of a "talent bank" file on university personnel possessing language skills and foreign area expertise; sponsorship of lectures and seminars on international topics of interest to the university and non-university communities; and dissemination of information about international programs of the university.

UNIVERSITY HONORS PROGRAM

PROFESSOR JOSEPH R. RILEY, *Director*
Room 115, Old Brister Library

The Honors Program has been created to provide exceptional educational opportunities for exceptionally able students. It is expressly intended to nurture the highly motivated, independent individual who seeks a stimulating environment appropriate to the student's unusual potential. The program offers a series of specially designed honors sections and courses, from which students may choose those courses which best suit their own interests and needs. Upon the successful completion of a minimum of 12 lower-division hours in honors courses, including the 1-hour Honors Forum (UNHP 1100), the honors student is qualified to receive an Honors Certificate and to enroll in an upper-division honors track. Students who do not choose to pursue certification in honors may still enroll in upper-division honors tracks upon successful completion of 6 lower-division hours in honors courses. In order to graduate with honors, a student must complete successfully a minimum of 18 semester hours of honors work, at least 12 hours of which must be upper-division courses offered as part of an approved upper-division honors track. Depending upon which honors track is chosen, a student who completes the Honors Program can be graduated with department, college, and/or University Honors. For example, a student might graduate "with honors in English (or economics, or history, etc.)" "with honors in Education," "with University Honors," or with combinations of these.

The University Honors Program is governed by the Honors Council, a committee composed of the Director of the Honors Program, the Assistant Director of the Honors Program, six faculty members chosen by the Academic Senate, and two honors students elected by the Honors Student Association. The Program is housed in Old Brister Library, Room 115, where the office of the Director is located, as well as a seminar-conference room and an honors lounge, open to all students who are active in the Honors Program.

Admission to the Program

Incoming freshmen who score at least 26 on the ACT, or its equivalent on other tests, are invited to participate. Transfer students or students previously enrolled at Memphis State University are eligible for the program if they have an overall grade point average of 3.0 for freshmen and sophomores and of 3.25 for upper-division students. Those who do not qualify in one of these ways will be considered upon direct application or receipt by the Director of a recommendation from high school or college faculty.

Curriculum and Requirements

Description of a typical honors plan is as follows:

Lower Division: Honors students at this level take specially designated sections of freshman and sophomore courses offered by departments throughout the university. Enrollment is limited to fifteen honors students, and these sections are taught by specially selected honors faculty. Qualified students may take lower-division honors courses simply because they prefer them over regular classes, and they may take as few or as many as they wish. If students choose to qualify for an Honors Certificate, however, they must meet the following requirements: (1) complete a minimum of 12 semester hours in lower-division honors classes, of which no more than 3 hours may be earned by contracting for honors; (2) maintain a QPA of 3.25 overall and make at least a B in the honors courses offered to fulfill the 12-hour requirement for honors certification; (3) complete successfully the University Honors Program course entitled *The Honors Forum*, for one hour of credit. Students who receive an Honors Certificate are automatically qualified to enter an upper-division honors track (departmental, college or university). Students who do not seek a certificate may qualify for an upper-division honors track by taking at least 6 lower-division honors hours with a minimum grade of B and, for most advanced programs, a minimum QPA of 3.25.

Upper Division: After the basic courses in honors have been completed, honors participants must opt for honors at the department, college or university level. Regardless of the individual's choice to pursue department or college honors (and regardless also of the availability of such programs in his chosen field), he may continue toward graduation with University Honors. This plan consists at the upper division of four honors courses in which students from across the university may participate. Topics are interdisciplinary in nature and vary from semester to semester. An honors thesis or project may be substituted for one of these courses. Descriptions of college and departmental programs are available in the appropriate college or department, or in the office of the University Honors Program.

Requirements and Standards

During the freshman and sophomore years the honors participant must maintain an overall QPA of at least 3.0 to remain in good standing in the program; the minimum QPA for continuing at the junior and senior levels is 3.25. There is provision for a one-semester probationary period before a participant is discontinued. A minimum grade of B is required in each honors course in order for it to count toward fulfilling the honors course requirement, but regular credit for the course will be earned if the grade is lower than a B.

Course Descriptions

Descriptions of the college and departmental programs are found with the appropriate major and degree descriptions.

V960 UNIVERSITY HONORS PROGRAM (UNHP)

1100. The Honors Forum. (1). Series of one-hour weekly lectures, demonstrations, performances, films, student presentations, and/or discussions designed to introduce the many disciplines, areas and intellectual and cultural opportunities available in the university. (S/U)

3100-3199. Junior Honors Colloquium I. (3). Interdisciplinary colloquium on broad theme or topic. Specific course descriptions each semester in "Addenda" section of *Schedule of Classes*. PREREQUISITES: junior standing and permission of Director of University Honors Program.

3200-3299. Junior Honors Colloquium II. (3). Same as UNHP 3100, except different theme or topic. PREREQUISITES: junior standing and permission of Director of University Honors Program.

4100-4199. Senior Honors Seminar I. (3). Interdisciplinary seminar on narrower theme or topic than ones in junior honors colloquia. Specific course descriptions each semester in "Addenda" section of *Schedule of Classes*. PREREQUISITES: senior standing and permission of Director of University Honors Program.

4200-4299. Senior Honors Seminar II. (3). Same as UNHP 4100, except different theme or topic. PREREQUISITES: senior standing and permission of Director of University Honors Program.

4300. Senior Honors Thesis. (3). In lieu of one of the above courses, the honors student may write a thesis on a topic approved by the University Honors Council and directed by a faculty committee chosen by the student and approved by the Honors Council. PREREQUISITES: senior standing and permission of the Director of the University Honors Program.

AEROSPACE STUDIES

LT. COL. GLENN F. BAKER,
Professor of Aerospace Studies
Room 404, Jones Hall

The Department of Aerospace Studies provides a four-year program of instruction for all qualified U.S. citizens, male and female, divided into two phases, each of two years duration. The first, termed the General Military Course, offers instruction in the foundation of leadership and Aerospace-age citizenship. The second, termed the Professional Officer Course, builds upon these foundations in developing upperclassmen who are to become Air Force officers and serve on active duty

upon graduation and commissioning. Students may apply for the two-year or four-year program, or they may enroll one year prior to applying for the two-year program.

Instruction in Aerospace Studies has been an important phase of the curriculum at Memphis State University since 1951. Active duty Air Force personnel, approved by the University President, are detailed by the Department of the Air Force to administer the instructional program. Air Force officers serve under appointment by the University as Professor or Assistant Professor of Aerospace Studies.

THE GENERAL MILITARY COURSE

The two-year (4 semesters) General Military Course consists of one hour a week of classroom instruction and one and one-half hours a week in Leadership Laboratory. Textbooks are furnished by the Air Force without charge. Air Force uniforms are furnished and must be properly worn and kept in good condition. A uniform deposit is required for all cadets at the time of registration. Cadets who successfully complete the General Military Course may apply for admission to the Professional Officer Course.

THE PROFESSIONAL OFFICER COURSE

The Professional Officer Course provides instruction and systematic training to selected eligible students who desire to qualify as officers in the United States Air Force while pursuing their academic studies at the University. Successful completion of the requirements for the Professional Officer Course and for a baccalaureate degree leads to a commission in the United States Air Force as a Second Lieutenant. To be eligible for selection to the Professional Officer Course, a student must have at least two years remaining at the University (undergraduate, graduate, or a combination). Final selection is based on academic standing, leadership potential, percentile score on the Air Force Officer Qualifying Test, and physical qualifications. All members of the Professional Officer Course receive a subsistence allowance of \$100.00 per month and are issued uniforms provided by the Air Force.

THE TWO-YEAR PROGRAM

All students who meet qualifying criteria, may apply for selection to the Professional Officer Course under the Two-Year Program if they are not in the Four-Year Program. Processing of applications for the Professional Officer Course begins in the Fall of each year. Application may be submitted through March 15. If selected, the student will attend a six-week field training program during the summer prior to entry into the Professional Officer Course. Graduates of the six-week field training are enrolled in the Professional Officer Course with the same status as cadets in the four-year program.

LEADERSHIP LABORATORY

This lab is designed around a microcosm of the U.S. Air Force. It gives the cadets the opportunity to develop their leadership potential while allowing the staff to make evaluations based on actual managerial situations.

AIR FORCE ROTC COLLEGE SCHOLARSHIP PROGRAM

Scholarships which pay full tuition and fees, book allowance, transportation to Memphis, and a tax free subsistence allowance of \$100.00 per month are available to entering freshmen and University students who are competitive academically and will enroll in the Air Force ROTC program. Details concerning qualifications and applications can be obtained from the Department of Aerospace Studies. NOTE: Several loan funds are also available to students enrolled in AFROTC. For more information, contact the department staff.

AFROTC students who accept a scholarship must agree to successfully complete at least one semester of college instruction in a major Indo-European or Asian language prior to commissioning. A major Indo-European or Asian language is one defined as such by the academic institution's foreign language department. Cadets may meet the foreign language requirement by completing a course or by demonstrating proficiency.

FIELD TRAINING

Offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of Field Training (AERO 3211), usually between their sophomore and junior years. Students applying for entry into the two-year program must successfully complete six weeks of Field Training (AERO 3212) prior to enrollment in the Professional Officer Course.

MINOR IN AEROSPACE STUDIES

Upon successful completion of 18 semester hours in Aerospace Studies, with a minimum grade of C, a cadet may apply for a minor in Aerospace Studies.

SUPPLEMENTAL COURSES PROGRAM

The AFROTC Supplemental Courses Program (SCP) exists to enhance the career utility and officer performance of persons commissioned through AFROTC. The program consists of required and recommended college/university-taught courses. All contract cadets must successfully complete the required supplemental courses in addition to all Aerospace Studies courses.

General Military Course (GMC): Contract cadets must successfully complete a course in English composition. Additionally, they are encouraged to take a course in speech. Four-year scholarship cadets must satisfactorily complete the English

composition course by the end of the GMC. GMC cadets receiving scholarships of less than four years duration will have two academic years to complete the English composition course. Failure to satisfactorily complete the required supplemental course in the specified period of time will result in termination of scholarship entitlements.

Non-scholarship four-year GMC cadets, two-year program applicants, and persons not required to complete the GMC need not take the GMC supplemental courses prior to POC entry. However, successful completion of GMC supplemental courses may enhance their chances for POC selection.

Professional Officer Course (POC): cadets must successfully complete a course in mathematical reasoning prior to commissioning. Ideally, this course should include the acquisition of a specific skill, for example, statistics, computer science, calculus, etc.

Course Descriptions

V950 AEROSPACE STUDIES (AERO)

1111. Air Force Today. (1). Study of world military forces through treatment of U.S. Department of Defense and doctrine, mission and functions of United States Air Force. *One class hour per week and one and one-half hours of Leadership Laboratory.** [G].

1112. Air Force Today. (1). Continuation of AERO 1111. One class hour per week and one and one-half hours of Leadership Laboratory.* [G].

2211. The Development of Air Power. (1). Historical perspective of airplane and its contribution to national defense; starting before Wright Brothers and continues through World War I. *One class hour per week and one and one-half hours of Leadership Laboratory.** [G].

2212. The Development of Air Power. (1). Continuation of AERO 2211. begins at end of World War I and continues through 1970's. *One class hour per week and one and one-half hours of Leadership Laboratory.** [G].

PROFESSIONAL OFFICER COURSE

3211. Aerospace Studies Four-Week Field Training. (4). Twenty-eight day course conducted during summer at active installation of USAF; consists of approximately 185 hours of instruction in Air Force base functions, leadership, physical training, Air Force environment, career orientation, and survival training. Students assigned to groups of twenty-five and individually counseled and evaluated on their performance. Emphasis on self-initiated leadership activities. PREREQUISITE: AERO 1111, 1112, 2211, 2212, or equivalent.

3212. Aerospace Studies Six Week Field Training. (6). Forty-two day course conducted during summer at active installation of USAF; Consists of approximately 256 hours of instruction on role of military forces, organization of Defense Department, instruments of national security, Air Force base functions, leadership, physical training and Air Force environment. Students are assigned to groups of approximately twenty-five and individually counseled and evaluated on their performance.

3311. Air Force Management and Leadership. (3). Professionalism, leadership and management. Includes meaning of professionalism, professional responsibilities, military justice system; leadership theory, functions and practices; management principles and functions; problem solving; and management, tools, practices and controls. *Three class hours per week and one and one-half hours of Leadership Laboratory.**

3312. Air Force Management and Leadership. (3). Continuation of AERO 3311. *Three class hours per*

week and one and one-half hours of Leadership Laboratory.*

4411. National Security Forces in Contemporary American Society. (3). Fundamental issues and requirements of national security. Extensive study of civil-military relations, nature of international environment and strategic requisites for defense. *Three class hours per week and one and one-half hours of Leadership Laboratory.**

4412. National Security Forces in Contemporary American Society. (3). Continuation of AERO 4411. *Three class hours per week and one and one-half hours of Leadership Laboratory.**

***Leadership Laboratory.** Revolves around cadet corps, a microcosm of an Air Force organization. Opportunity for actual leadership training experiences as it is largely cadet planned and operated. Additionally, staff uses it as a means to evaluate and develop leadership potential. *One and one-half hours per week*

MILITARY SCIENCE

LIEUTENANT COLONEL
WILLIAM J. CORADINI, *Director*
Professor of Military Science,
Room 110, building 160

The Department of Military Science provides a four year program of instruction designed to provide qualified college men and women with practical experience in the art of organizing, motivating and leading others. The program is divided into two courses each of two years duration. The first, called the Basic Course, offers instruction in leadership skills, soldiering skills, and the role and use of armed forces. The second, called the Advanced Course, builds on the Basic Course, offers practical leadership experience, and prepares the student for commissioning as an Army officer. Students may apply for the four-year program, which can be completed in three years with department permission, or may apply for a two-year program.

Department faculty and staff are active duty Army personnel detailed by Department of the Army and approved by the university President. The Army officers are appointed by the university as Professor or Assistant Professor of Military Science. Students interested in enrolling in any Military Science course should contact the Department of Military Science.

THE BASIC COURSE

The Basic Course, two years in duration, consists of two semesters of one hour per week of classroom instruction and two semesters of two hours per week of classroom instruction. Courses are designed to be taken in the following order: 1110, 1120, 2105, 2110. All textbooks are furnished, without charge, by the department.

All offered courses count as elective credit toward the total university required hours for a degree. ARMY 2110 meets the physical activity portion of the General Education Fitness and Wellness requirement.

The Basic Course is designed to be entered into as an incoming Freshman. All other students are eligible to enter and may

compress the Basic Course requirements into one year, with department permission. There is NO MILITARY OBLIGATION for enrolling in the Basic Course. Unless specified in the course description, students in the Basic Course are not required to wear uniforms or attend leadership laboratory.

Students who successfully complete the Basic Course may apply for entry into the Advanced Course.

THE ADVANCED COURSE

The Advanced Course prepares qualified, selected male and female students for commissioning as an Army officer while they continue to pursue academic degrees. Upon graduation, students may then serve in the Regular Army, Army Reserve, or Army National Guard in a variety of career fields.

To be eligible for the Advanced Course, the student must have completed the Basic Course or equivalent, (see 2-year program), be enrolled with the University in

a full-time status, have at least two years remaining at the University (undergraduate or graduate), and be a U.S citizen. Final selection is based on demonstrated academic performance, leadership potential, a qualifying score on the Officer Selection Battery of Tests, and physical qualifications.

The Advanced Course is two years in duration. During each of four semesters, the student attends three hours per week of classroom instruction and two hours per week of leadership laboratory. It is comprised of Army 3110, 3120, 4110, and 4120, in sequence. All students receive a monthly subsistence allowance of \$100.00, tax-free, while enrolled in classes. All textbooks, uniforms, and equipment are furnished, without charge, by the department.

Students are given the opportunity to develop their leadership skills through the leadership laboratory, field training, and the Advanced Camp. The leadership laboratory is designed around a cadet structure which parallels a U.S. Army unit. Field training exercises are conducted over a weekend and are an extension of the



laboratory. Students are also required to attend a six week Advanced Camp during the summer between their two years in the Advanced Course. It is held at Fort Lewis, Washington, a U.S. Army post. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from.

All required courses count as elective credit toward the total university required hours for a degree. Completion of the Advanced Course meets the Fitness and Wellness General Education requirement.

THE TWO-YEAR PROGRAM

The Two-Year Program provides the opportunity to those students who did not enroll in the Four-Year Program to enroll in the Advanced Course. There are three methods for students to receive placement credit for the Basic Course and enter directly into the Advanced Course.

Students, who meet qualifying criteria, may receive credit for the Basic Course by attending the six-week Basic Camp at Fort Knox, Kentucky, during the summer. NO MILITARY OBLIGATION is incurred by the student by attending the Basic Camp. Students are paid for the six weeks at the rate of one-half the pay of a Second Lieutenant and are furnished quarters and rations as well as transportation to and from, or a mileage allowance for use of their own automobile. Successful completion of the Basic Camp will make the student eligible to enter the Advanced Course. Interested students should contact the Department of Military Science anytime during the academic year preceding the summer they desire to attend the camp.

Students who have completed Army Basic Combat Training and Advanced Individual Training or have completed a minimum of three years of Army Junior ROTC in high school may be granted credit for the Basic Course by the Professor of Military Science and would then be eligible for entry into the Advanced Course, provided all other requirements are met. These students, as well as Basic Camp graduates, selected for enrollment in the Advanced Course are enrolled with the same status as cadets in the Four-Year Program.

SCHOLARSHIP PROGRAM

Scholarships which pay tuition, maintenance fee and other fees, a book allowance, and a tax-free subsistence allowance of \$100.00 per month are available to university freshmen and sophomores who are competitive academically and will enroll in the Army ROTC program. Applications are taken from December to February each academic year. Details concerning qualifications can be obtained from the Department of Military Science.

SIMULTANEOUS MEMBERSHIP PROGRAM

The Simultaneous Membership Program is a voluntary program under which

qualified cadets in the Advanced Course may concurrently join an Army Reserve or Army National Guard unit. The program is designed to provide the cadet with additional opportunities for leadership development and, at the same time, provide him or her with practical unit experience as a Second Lieutenant. The cadet serves in an officer-trainee capacity and participates in regular unit drills held one weekend per month and two weeks per summer. The cadet is paid for all drill at the rate of a sergeant. This pay is in addition to the regular monthly subsistence for Army ROTC cadets. Details concerning qualifications and information on availability of allocations can be obtained from the Department of Military Science.

PROFESSIONAL MILITARY EDUCATION

Professional Military Education is a component of the academic preparation for students desiring to pursue a commission as an Army officer. It consists of two essential parts, a baccalaureate degree and completion of university-taught, undergraduate courses from each of five designated fields of study. The fields of study are written communications, human behavior, military history, computer literacy, math reasoning, management, and national security studies. This is a requirement for students enrolled in the Advanced Course only, though applicable courses taken during enrollment in the Basic Course or prior to enrollment may still meet the requirement. Related required and elective courses taken for university degree requirements may also satisfy the requirement. Some of the Professional Military Education required courses may be waived by the Professor of Military Science if they would interfere with a student's required curriculum for award of a particular university degree.

SPONSORED ACTIVITIES

The Department of Military Science sponsors the following voluntary extracurricular activities to provide students in both the Basic Course and Advanced Course with additional opportunities to develop leadership in conjunction with extending the students' knowledge of military skills:

1. The Army ROTC Rifle Team—Members develop skill in target rifle marksmanship. Selected members represent Memphis State University Army ROTC in small bore rifle competition with ROTC teams of other colleges and universities. The team is open to individuals enrolled in any Military Science course.

2. The Army ROTC Tiger Drill Team—Members develop skill in standard and exhibition drill and military ceremonies. The team provides color guards at Memphis State University athletic events and drills competitively against ROTC teams of other colleges and universities. The team is open to individuals enrolled in any Military Science course.

3. M.S.U. Ranger Company—Members develop skills associated with patrolling, mountaineering, survival training, and other similar activities. The Ranger Company is an adventure-type unit under the direction of Army ROTC Advanced Course cadets. Membership is open to all interested full-time students.

4. Orienteering Team—Members develop skills associated with Land Navigation, Terrain Association, and related skills. The Orienteering Team is an adventure-type unit under the direction of Army ROTC Advanced Course Cadets. *Membership is open to individuals enrolled in any Military Science Course.

* Selected members participate in Orienteering Competition in the local area.

Course Descriptions

V955 MILITARY SCIENCE (ARMY)

1110. **Basic Military Science I - Leadership.** (1). Principles and techniques of leadership at small unit or group level with emphasis on communication and motivation. Study of structure and functions of components and branches of US Army.

1120. **Basic Military Science II - Battlefield Casualty Treatment.** (1). Basic military first aid skills; lectures and practical exercises in basic emergency treatment for fractures, lacerations, heat and cold injuries; cardio-pulmonary resuscitation. THIS COURSE DOES NOT PROVIDE RED CROSS OR ANY OTHER CERTIFICATION.

2105. **Basic Military Science III - Combat Operations - Historical Analysis.** (3). (Same as HIST 3811). Developments since colonial period; emphasis on background and growth of national military and naval establishments, military and naval thought, difficulties accompanying modernization and assumption of global responsibilities, and problem of relationship between civilian and military-naval sectors in democracy.

2110. **Basic Military Science IV - Basic Soldier Skills.** (2). Basic military skills including map reading, personnel evaluation, planning and organizing, drill and ceremonies, and small unit tactics. One hour weekly classroom instruction, two hours leadership lab every other week, and two field practicums (approximately 8 hours each) held on Saturday. Students are issued and required to wear uniforms to all classes and labs. [G].

2140. **Combat Training of the Individual Soldier and Patrolling.** (2). Emphasis on preparation of the individual for combat. Preparation of potential leaders in combat through study of the knowledge and skills needed by an individual soldier. Skill developed in planning and organizing by combat patrols. Course includes a series of field practicums.

2170. **Tactics Strategy and War Games.** (2). Basic fundamentals of planning, organizing and employing units in combat. The art and science of warfare, through war games, practice of skills in simulated situations.

2190. **Camp Training.** (1-6). Six-week training normally taken during the summer between the second and third years by those students who have not taken previous ROTC training, or who have not completed the required basic military science courses for advanced course enrollment. Training conducted at designated U.S. Army installation and includes practical experience in leadership, small unit tactics, weapons drill, and communications under field conditions. After completion of camp, student required to complete satisfactorily an examination administered by Military Science Department. Student must register for this course following successful camp completion in order to receive appropriate credit. Students receive approximately \$670.00 pay, room and board, and travel expenses. No military obligation is incurred.

PREREQUISITE: Permission of Professor of Military Science. [G].

3110. Advanced Military Science I. Preparation for Advanced Camp. (4). (3190). Presentation, discussion, practical exercise, and field training on fundamentals of map reading and land navigation; development of skills in individual and small unit tactical planning and operations; and professional subjects in leadership, leadership assessment, and principles of war. *Three lecture hours per week, two laboratory hours every other week, three hours physical training each week, and field training exercises on two weekends during semester.* PREREQUISITE: permission of Professor of Military Science. [G].

3120. Advanced Military Science II. (4). Continuation of first year advanced course. PREREQUISITE: permission of Professor of Military Science. [G].

3190. Advanced Camp Training. (6). Six weeks of training at Fort Lewis, WA, normally taken between the 1st and 2nd years of Advance Course; practical experience in leadership, small unit tactics, US Army weapon systems and equipment, and patrolling operation; examination administered by the Department of Military Science required to receive academic credit. Students must register for course following successful camp completion to receive credit. PREREQUISITE: permission of Professor of Military Science. [G].

4110. Advanced Military Science III. (4). Leadership and management skill development in specific areas of oral and written communications, training management, personnel evaluation and counseling, personnel management systems of Army, U.S. Army logistic systems, military justice, and familiarization with ethics of military professional. This course, in conjunction with 4120, completes the cadet's preparation for commissioning as a 2LT in the Army Reserve or National Guard. *Three lecture hours per week, two laboratory hours every other week, three hours physical training each week, and field training exercises on two weekends during semester.* PREREQUISITE: permission of Professor of Military Science. [G].

4120. Advanced Military Science IV. (4). Continuation of second year advanced course. PREREQUISITE: permission of Professor of Military Science. [G].

NAVAL SCIENCE

CAPTAIN ROBERT A. CONDER,
Professor of Naval Science
Room 101A, Art Annex

The Department of Naval Science provides a four-year program of instruction leading to a commission as an officer in the regular U.S. Navy or Marine Corps as well as Naval Reserve or Marine Corps Reserve. The program is known as the Naval Reserve Officer Training Corps (NROTC) and is voluntary in that students may withdraw from the program at any time during the freshman year. At the start of the sophomore year, scholarship NROTC students enter into an agreement with the Department of the Navy that specifies active duty service after college work is completed.

REQUIREMENTS

The general requirements for enrollment in the NROTC College Program are:

1. be a citizen of the United States
2. be physically qualified

3. possess personal characteristics and potential relevant for naval officer
4. not be a conscientious objector
5. meet other requirements as specified by the U.S. Navy.

THE FOUR YEAR PROGRAM

The four year program is geared to students who enter the NROTC program as freshmen. Students will be introduced to the field of naval science which encompasses a broad variety of subjects ranging from basic seamanship to fleet operations. Topics covered during the first half of the four year program include principles of naval ships systems, naval weaponry, seapower, and maritime affairs. The second half (junior and senior years) is devoted to navigation and naval operations, naval leadership and management, and, for Marine Option Students, Amphibious Warfare and a study of warfare through the ages. In addition to specified courses, students will also meet with their NROTC unit for orientation experiences to service life. Six week summer training cruises are also part of the naval science program.

THE TWO YEAR PROGRAM

The two-year program is for interested students who want to participate in NROTC in their junior and senior years. Students should apply for enrollment through the Professor of Naval Science before the spring semester of the sophomore year. If accepted into the two-year program, students will attend the six-week Naval Science Institute at Newport, Rhode Island, during the summer between the sophomore and junior years. Upon return to campus, students will be enrolled in the NROTC program and participate as regular students.

FINANCIAL BENEFITS AND NROTC SCHOLARSHIPS

All NROTC students receive required uniforms and naval science textbooks when they begin the program as freshmen. In their junior year as college program or two year program students, they will also receive a tax-free subsistence allowance of \$100 a month. NROTC scholarship students will also receive tuition, cost of textbooks, instructional fees and \$100 a month. Students will receive pay while participating in summer training experiences and be reimbursed for associated travel. Students interested in the Navy ROTC programs should contact the Professor of Naval Science.

Course Descriptions

V958 NAVAL SCIENCE (NAVY)

1100. Navy Laboratory. (1). Two laboratory hours per week. [G].

1101. Introduction to Naval Science. (2). Orientation and concepts of seapower. Mission, organization, and warfare components of the Navy and Marine Corps. COREQUISITE: Navy 1100.

1102. Naval Ships Systems I - Engineering. (3). Ship characteristics and types including ship design,

hydrodynamic forces, stability, compartmentation, propulsion, electrical and auxiliary systems, interior communications, ship control, and damage control. COREQUISITE: Navy 1103.

1103. Navy Laboratory. (1). Two laboratory hours per week. [G].

2200. Navy Laboratory. (1). Two laboratory hours per week. [G].

2201. Naval Ships Systems II - Weapons. (3). Theory and employment of weapons systems. Processes of detection, evaluation, threat analysis, delivery, guidance, and explosives. COREQUISITE: Navy 2200.

2202. Seapower and Maritime Affairs. (3). U.S. naval history from the Revolution to the present with emphasis on major developments. Present day concerns in seapower and maritime affairs. COREQUISITE: Navy 2203.

2203. Navy Laboratory. (1). Two laboratory hours per week. [G].

3000. Naval Science Institute (NSI). (8). Intensive six-week professional academic and training program conducted each summer at a naval installation by the Chief of Naval Education and Training for students entering the Two-year NROTC Programs. The Naval Science Institute is the equivalent of the *NROTC Basic Course* [G].

3301. Navigation and Naval Operations I. (3). Piloting and celestial navigation including theory, principles, and procedures. Use of charts, visual and electronic aids, and the theory and operation of magnetic and gyro compasses. *Three class hours and two hours of Navy Laboratory* per week.*

3302. Navigation and Naval Operations II. (3). International and inland rules of the nautical road, relative-motion vector-analysis theory, relative motion problems, formation tactics, and ship employment. *Three class hours and two hours of Navy Laboratory* per week.*

3310. Evolution of Warfare. (3). Historical development of warfare from the beginning of recorded history to the present focusing on the impact of major military theorists, strategists, tacticians, and technological developments. *Three class hours and two hours of Navy Laboratory* per week.*

4000. Marine Corps Leadership Training. (6). Summer instruction ("Bulldog") conducted at the Marine Corps Officer Candidate School, Quantico, Virginia. Intensive six week professional training program for Marine Option Junior Midshipmen. Focuses on Marine Corps history and tradition, leadership under high stress situations, and effective management of men and materials in simulated combat conditions.

4401. Naval Leadership and Management I. (2). Advanced study of organizational behavior and management in the context of the naval organization. Practical applications are explored by the use of experiential exercises, case studies, and laboratory discussions. *Two class hours and two hours of Navy Laboratory* per week.*

4402. Naval Leadership and Management II. (2). Naval junior officer responsibilities in naval administration; builds on and integrates the professional competencies developed in prior course work and professional training. *Two class hours and two hours of Navy Laboratory* per week.*

4410. Amphibious Warfare. (3). Historical survey of the development of amphibious doctrine and the conduct of amphibious operations. Emphasis is placed on the evolution of amphibious warfare in the 20th century, especially during World War II. *Three class hours and two hours of Navy Laboratory* per week.*

***Navy Laboratory.** Focus on the Midshipman Corps. Involves leadership training opportunities and experiences.

AUDIOLOGY AND SPEECH PATHOLOGY

V915 AUDIOLOGY AND SPEECH PATHOLOGY (AUSP)

4100-6100. Introduction to American Sign Language. (2). Introduction to structure of American Sign Language. Includes manual alphabet and basic

vocabulary. Practical applications in communication with deaf individuals and in signing in the performing arts.

4200-6200. Introduction to Communication Disorders. (3). Communication disorders with special reference to those encountered by educators and others in population 0-21. Observation and discussion of classroom management, roles of various specialists, and parent conferences.

INTERDISCIPLINARY STUDIES

V933 INTERDISCIPLINARY STUDIES (INTD)

The following courses, INTD 3510 and 3511, comprise an eight month training program in law enforcement which prepares students for seasonal employment as rangers in the National Park Service and the Arkansas and Tennessee State Park Services. The program is coordinated by the Department of Psychology and the area of Parks and Recreation in the Department of Health, Physical Education and Recreation.

3510. Behavior Management in Recreation Areas I. (4). Concepts of industrial training and social psychology applied to teaching content and skills required for people-management positions as rangers in federal and state parks. Classroom instruction, readings and applied practical exercises included. PREREQUISITE: permission of instructor.

3511. Behavior Management in Recreation Areas II. (4). Advanced consideration of content and skills involved in managing people who visit recreation areas, including: abnormal behavior and human relations, basic accident investigation, alcohol and drug abuse, and courtroom testimony and procedures. PREREQUISITE: INTD 3510 and permission of instructor.

MEMPHIS STATE UNIVERSITY LIBRARIES

PROFESSOR LESTER POURCIAU, Director
Room 101A, Old Brister Library

V945 MSU LIBRARIES (LBRY)

2010. Introduction to the Use of Library Resources. (3). Introduction to organization of academic library material; emphasis on bibliographic access to information. Lectures and assigned research problems to acquaint student with general and specialized methods of access to library material.

ORIENTATION PROGRAM

V905 ORIENTATION PROGRAM (ACAD)

The Orientation Program offers a 3-credit course for entering freshmen only. The course has been specially designed to assist freshmen in making the transition to higher education by introducing them to the expectations and opportunities provided by the university.

1100. Introduction to the University. (3). History, philosophy, and principles of higher education, with emphasis on Memphis State University. Special attention to developing student skills necessary to meet the intellectual expectations of the university. *OPEN TO FRESHMEN ONLY.*

REMEDIAL AND DEVELOPMENTAL STUDIES

R. WILSON WALKER, Dean
Room 171, Administration Building

The Remedial and Developmental Studies Program at Memphis State permits

students to enroll in special remedial/developmental level courses to achieve the academic competencies necessary for success in college level courses. Major components of the program include testing and placement in appropriate level courses, classroom instruction and group/individual tutoring and counseling assistance.

ADMISSION TO THE PROGRAM (PLACEMENT)

Students admitted to Memphis State University as beginning freshmen may be required to take various placement tests to determine if they have the appropriate academic skills to successfully complete college level courses. Depending on the results of these tests, students may be required to take one or more Remedial/Developmental Studies courses. The following regulations regarding placement tests and course enrollment will apply:

First Time Freshmen admitted with less than 16 ACT or no ACT admissions score must take the required placement test as a condition of enrollment and enroll in the courses indicated by the test results. An adviser in the Academic Counseling Unit or the Developmental Studies Office should be consulted regarding the test scores and placement.

ALL students enrolling in any Remedial/Developmental Studies (R&DS prefix) courses must take the mandated State Board of Regents AAPP Placement test. Only those students taking the appropriate academic area placement test in English, Mathematics, Reading and/or Study Skills Test will be allowed to enroll in the courses. Students taking the test must enroll in and begin each subject area sequence at the level indicated by the test results, complete that particular sequence and take the subject area exit test prior to enrolling in the subsequent Level I (college level) course.

RE-TESTING

The placement test may not be repeated until at least 90 days have lapsed since the first testing.

CREDIT

Each Remedial/Developmental Studies course carries 3 semester hours of pre-college level credit. The credit may not be included in determining the number of college level credit hours earned or toward meeting any degree credit requirement.

ENROLLMENT RESTRICTIONS

As a result of the placement test, students may be placed in all remedial level courses, a combination of remedial and developmental courses, all developmental courses, or a combination of developmental and college level courses. Only students who have been assessed as needing remedial/developmental level courses will be permitted to enroll in those courses. Self-placement is not permitted. The maximum class load allowed is 15 semester hours.

FEES

Enrollment in Remedial/Developmental Studies courses will not affect student financial aid, scholarship or housing regulations. Fees are the same as for college level courses.

COUNSELING AND TUTORING

All Developmental Studies students will be advised in the Academic Counseling Unit, Room 107, Scates Hall. Participation in tutoring and individual/group counseling sessions will be required.

COURSE GRADES AND CLASS ATTENDANCE

A minimum grade of C will be required to successfully complete all Remedial/Developmental Studies courses. Grades will be given in all courses and these grades will become a part of the student's official transcript. Incomplete (I) grades and "Audits" are not permitted. Regular class/lab attendance is mandatory and will be used in determining continued class enrollment and semester grades.

ADD/DROP AND WITHDRAWAL

All students in Remedial/Developmental Studies courses wishing to add/drop a course or withdraw from the university must make an application to the Program Director within the normal university deadlines as stated in the "Semester Calendar". Approval for course add/drops or withdrawals will be made at the discretion of the Developmental Studies Program Director.

ACADEMIC RETENTION

Developmental Studies students will be placed on Academic Probation at the completion of any regular semester or summer session when a grade of less than C is earned on any Remedial/Developmental Studies course. At the next term of enrollment, these students will be required to repeat the Remedial/Developmental Studies course in which they earned a grade of less than C. Students who fail to earn a grade of C or higher in the second attempt in that Remedial/Developmental Studies course will be suspended and ineligible for further enrollment in the university.

Course Descriptions

V986 REMEDIAL AND DEVELOPMENTAL STUDIES (R&DS)

0710. Basic Composition. (3). (ASDS). Brief reading and writing assignments; emphasis on basic competencies in spelling, punctuation, grammar, and stating and developing a thesis. PREREQUISITE: Placement by writing sample. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

0720. Basic Mathematics. (3). (ASDS). Numbers and number operations, ratio and proportion, percent, statistics, measurement, geometry, variables and equations. Preparation for R&DS 0820. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

0740. Basic Reading Skills. (3). (ASDS). Essential reading skills needed as foundation for critical reading skills; emphasizes word attack skills, general vocab-

ulary development, comprehension, and increased reading rate. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

0810. Developmental Composition. (3). (ENGL 1100, ASDS 0810). Expository writing; emphasis on focus, development, and revision of short essays; review of problem areas of grammar, sentence style, punctuation, and use of sources. For those who need instruction in composition at developmental level. PREREQUISITE: Placement by writing sample or successful completion of R&DS 0710 with a grade of C or better. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

0820. Developmental Algebra I.(3). (ASDS). Real numbers, variables, solving equations, polynomials, factoring, algebraic fractions, linear equations, systems

of linear equations, inequalities, radicals, quadratic equations. Preparation for R&DS 0821; intended for those who have not had algebra or who do not have a working knowledge of first year algebra course. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

0821. Developmental Algebra II. (3). (ASDS). First-degree equations, linear equations in two variables, polynomials, rational expressions, exponents and radicals, conic sections, systems of equations, inequalities, logarithms, sequences and series. Intended for those who have had R&DS 0820 or who have working knowledge limited to first year course in high school algebra. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

0830. Developmental Study Skills. (3). (ASDS). Necessary reasoning and study skills for college level work; emphasizes critical thinking skills and efficient study techniques. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

0840. Developmental Reading Skills. (3). (CIED 1201, ASDS 0840). Critical reading skills prerequisite for comprehension of college texts; emphasizes increased development of general vocabulary as well as technical and specialized vocabularies. Comprehension with special attention directed toward critical reading skills and improvement of reading flexibility and reading rate. *Three lecture, one laboratory hour per week. Credit earned will not apply toward degree credit.*

8. FACULTY AND STAFF

PRESIDENT'S OFFICE

THOMAS G. CARPENTER, Ph.D., President
 KATHRYN HOOKANSON, J.D., Assistant to the President, Legal
 RITA R. RICHARDSON, B.B.A., Director of Internal Auditing
 MARKHUM L. STANSBURY, B.A., Assistant to President

ACADEMIC AFFAIRS

VICTOR FEISAL, Ph.D., Vice President for Academic Affairs
 JOHN R. DILL, Ph.D., Associate Vice President-Academic Programs
 EDMUND P. SEGNER JR., Ph.D., Associate Vice President for Research
 W. THEODORE MEALOR, JR., Ph.D., Interim Associate Vice President for Planning
 MARANEL SLUTSKY, M.Ed., Director of Curriculum Planning
 NOEL SCHWARTZ, M.Ed., Director of Registration and Scheduling
 DANIEL J. POJE, Ed.D., Coordinator of Academic Programs
 DOROTHY ARATA, Ph.D., Dean of Graduate Studies
 LESTER J. POURCIAU, JR., Ph.D., Associate Vice President, Director of Libraries
 EVELYN CLEMENT, Ph.D., Director of Instructional Services and Research
 FREDERICK DAVIS, J.D., Dean of The Cecil C. Humphreys School of Law
 RAYMOND WILSON WALKER, Ed.S., Dean, Academic Services and Developmental Studies
 BONITA LYONS, Ed.D., Assistant Dean, Academic Services and Developmental Studies
 ROBERT FRANKLE, Ph.D., Director of General Education Program
 MARYANNE HICKEY, M.Ed., Director of Short Course Instruction, Continuing Education
 JOHN Y. EUBANK, JR., Ed.D., Dean of Admissions, Records and Registration
 DAVID R. WALLACE, M.S., Associate Dean of Admissions and Records (Admissions)
 RICHARD O'BRYAN, Ed.D., Associate Dean of Admissions and Records (Records)

STUDENT EDUCATIONAL SERVICES

DONALD K. CARSON, Ph.D., Vice President and Dean of Students
 DAVID A. COLLINS, M.A., Assistant to the Vice President
 JOSEPH I. PETTIGREW, Ed.D., Assistant to the Vice President, Director of Enrollment Management
 MRS. JUNE P. ARMITAGE, Director of Student Relations
 MARION F. EMSLIE, Ed.D., Associate Dean of Students, Student Development
 CLARENCE O. HAMPTON, M.A., Associate Dean of Students, Student Life
 AUTHUR S. HOLMON, M.Ed., Associate Dean of Students, Minority Affairs
 JOSEPH E. LANDRUM, J.D., Assistant Dean of Students, Judicial Affairs
 JOHN J. ANDERSEN, M.S., Director of University Center
 ALLEN J. HAMMOND, M.Ed., Director of Student Financial Aid
 ROSIE P. BINGHAM, Ph.D., Director of Center for Student Development
 N. DEWAINE RICE, Ed.D., Assistant to the Vice President and Director of Residence Life
 DONA S. SPARGER, M.A., Director of Office for Students with Disabilities
 TIMOTHY L. SUMNER, Ed.D., Director of Athletic Academic Counseling Unit
 MS. JULIALYNNE WALKER, J.D., Director of Adult and Commuter Students Services
 WALTER S. WARREN, M.B.A., Director of University Placement

BUSINESS AND FINANCE

R. EUGENE SMITH, Ph.D., Vice President for Business and Finance
 RAYMOND PIPKIN, M.A., C.P.A., Associate Vice President of Finance
 JOSEPH T. BOND II, B.B.A., Director of Purchasing
 JOHN W. COHERN, J.D., Assistant to the Vice President for Business and Finance; Director of Administrative and Business Services
 BARBARA OLSTEAD, Assistant to the Vice President for Business and Finance
 BERGEN S. MERRILL, M.S.C.E., Director of Physical Plant and Planning
 ROGER FOWLER, M.Ed., Director of Security and Safety Services
 BILL WILLIAMS, M.Ed., Director of Personnel

PLANNING AND PUBLIC SERVICE

VAN N. OLIPHANT, D.B.A., Vice President for Planning and Public Service
 EDITH W. BEATY, B.F.A., State Coordinator of Clean Tennessee Program
 ROBERT L. COLLIER, M.B.A., Director of Public Service
 SHERMAN FRANKLIN, J.D., Director of Development
 MARY GARDINER GRUENEWALD, M.Ed., Director of Institutional Research
 GEORGE D. MICKLE, M.B.A., Manager of Planning and Special Projects
 ROBERT D. PLUNK, B.S., Director of National Alumni Association
 CHARLES D. ROLLINS, B.S., Director of Computer Services
 LEONARD D. ROSSER, D.B.A., Director of Tennessee Small Business Development Center

UNIVERSITY COMMUNITY RELATIONS

CHARLES F. HOLMES, M.A., Director of University Community Relations
 RONALD S. ALFORD, M.Ed., Publications Director
 DEBORAH W. BAKER, B.A., Media Relations Director
 JAMES CLOUD, B.S., Publications Assistant Director - Art
 LISA M. DAVIS, Information Center Manager
 ELIZABETH W. MARSHBURN, M.Ed., Publications Editor
 GILBERT F. MICHAEL, Photographic Services Director
 KATHY O'GWIN, B.A., Coordinator-Community Affairs
 JULIA WOOD, M.A., Media Relations Assistant Director - Video

RESEARCH AND SERVICES

EDMUND P. SEGNER, JR., Ph.D., Associate Vice President for Research
 EDWARD L. BLEIBERG, Ph.D., Director of Institute of Egyptian Art and Archaeology
 JERRY N. BOONE, Ph.D., Director of Center for the Study of Higher Education
 HARRY L. BOWMAN, Ed.D., Director of Bureau of Educational Service
 LYNN W. CANNON, Ph.D., Director of Center for Research on Women
 RONALD W. CLEMINSON, Ph.D., Director of Center for Environmental and Energy Education
 LEWIS B. COONS, Ph.D., Director of Electron Microscopy Center
 DAVID N. COX, Ph.D., Director of Center for Health Services Research
 CHARLES CRAWFORD, Ph.D., Director of Oral History
 WILLIAM CUNNINGHAM, Ph.D., Director of Transportation Studies Institute
 GRAVES E. ENCK, Ph.D., Director of Aging/Life Cycle Studies
 STANLEY P. FRANKLIN, Ph.D., Director of Institute for Intelligent Systems
 JOHN GNUSCHKE, Ph.D., Director of Center for Manpower Studies; Bureau of Business and Economic Research

STANLEY HYLAND, Ph.D., Director of Center for Voluntary Action Research

COL. MARVIN JACOBS, Director of Center for River Studies
 ARCHIBALD C. JOHNSTON, Ph.D., Center for Earthquake Research and Information
 WALTER JONES, Ph.D., Director of Institute of Governmental Studies
 MICHAEL L. KENNEDY, Ph.D., Director of Edward J. Meeman Biological Field Station
 STEVEN J. KLAINE, Ph.D., Director of the Environmental Health and Toxicological Institute
 CHARLES J. LONG, Ph.D., Director of MSU-UT Center for Neuropsychology and Evoked Potential
 MAURICE I. MENDEL, Ph.D., Director of Memphis Speech and Hearing Center
 EARL E. PEARSON, JR., M.U.R., Director of Regional Economic Development Center
 NORMAN S. TRENT, M.Ed., Director of Office of Sponsored Programs
 (VACANT), Executive Director of Institute for Engineering Research

INTERCOLLEGIATE ATHLETICS

CHARLES CAVAGNARO, B.S., Athletic Director
 LYNN PARKES, M.A., Assistant Athletic Director (Women)
 BOB WINN, B.A., Sports Information Director/Football
 LEE FOWLER, M.A., Assistant Athletic Director, Director of Tiger Clubs
 BOBBY KILPATRICK, B.S., Coordinator of Spring Sports
 FRED STEWART, B.S., Athletic Business Manager

THE COLLEGES AND DEPARTMENTS

THE COLLEGE OF ARTS AND SCIENCES

DR. WILLIAM E. CARPENTER Ph.D., Dean, College of Arts and Sciences
 H. DELANO BLACK, Ph.D., Assistant Dean
 THOMAS R. CAPLINGER, Ph.D., Assistant Dean
 JOHN R. HADDOCK, Ph.D., Director of Graduate Studies and Research
 POLLY DENNISON, B.A., Graduation Analyst
 FRANK M. DYER, JR., Ed.D., Academic Counselor
 MARCIA GNUSCHKE, B.S., Assistant to the Dean

ANTHROPOLOGY

THOMAS W. COLLINS, Ph.D., Chair

LINDA A. BENNETT (1986), Professor: B.A., 1965, Clarion State College; M.A., 1966, Indiana University; Ph.D., 1976, American University
 THOMAS W. COLLINS (1972), Professor, Chair: B.S., 1957, Central Michigan University; M.A., 1962, Western Michigan University; M.A., 1967, Ph.D., 1971, University of Colorado
 DAVID H. DYE (1981), Associate Professor: B.A., 1972, Memphis State University; M.A., 1976, Louisiana State University; Ph.D., 1980, Washington University
 RUTHBETH D. FINERMAN (1985), Assistant Professor: B.A., 1977, M.A., 1979, Ph.D., 1984, University of California at Los Angeles
 STANLEY E. HYLAND (1976), Associate Professor: B.A., 1969, M.A., 1970, University of Cincinnati; Ph.D., 1976, University of Illinois
 MONTE RAY KENASTON (1966), Assistant Professor: B.S., 1957, University of Texas; M.A., 1966, Washington State University; Ph.D., 1972, Southern Illinois University
 CHARLES H. MCNUTT (1964), Professor: B.S., 1950, University of the South; M.A., 1954, University of New Mexico; Ph.D., 1960, University of Michigan
 GERALD P. SMITH (1968), Adjunct Associate Professor, Curator of Chalcisida: B.A., 1963, Southwestern at Memphis; M.A., 1965, University of North Carolina; Ph.D., 1971, University of Missouri
 CHARLES WILLIAMS, JR. (1979), Assistant Professor: B.A., 1969, Rust College; M.A., 1976, Ph.D., 1981, University of Illinois

BIOLOGY

JAMES F. PAYNE, Ph.D., Chair

HAROLD R. BANCROFT (1962), Associate Professor: B.S., 1958, M.S., 1959, Ph.D., 1962, Mississippi State University

MELVIN L. BECK (1974), Professor: B.S., 1967, Arkansas Tech College; Ph.D., 1974, University of Arkansas

HOWARD BERG (1987), Assistant Professor: B.S., 1972, M.S., 1975, Ph.D., 1977, University of Florida

CHARLES J. BIGGERS (1969), Professor: B.S., 1957, Wake Forest University; M.A., 1959, Appalachian State University; Ph.D., 1969, University of South Carolina

HARVEY DELANO BLACK (1970), Associate Professor, Assistant Dean, College of Arts and Sciences: B.A., 1959, Hendrix College; M.S., 1965, University of Arkansas; Ph.D., 1971, University of Nebraska

CARL D. BROWN (1951), Professor Emeritus: B.S., 1947, Oklahoma Baptist University; M.S., 1947, Louisiana State University; Ph.D., 1951, Iowa State University

MARTHA P. BROWN (1966), Assistant Professor: B.S., 1963, M.S., 1966, Memphis State University

KING-THOM CHUNG (1988), Associate Professor: B.S., 1965, National Taiwan University; M.A., 1967, University of California, Santa Cruz; Ph.D., 1972, University of California, Davis

BEVERLY COLLINS (1988), Assistant Professor: B.S., 1977, University of Kentucky; M.S., 1979, Ph.D., 1985, Rutgers University

LEWIS B. COONS (1976), Professor, Director of Electron Microscope Center: B.A., 1964, M.S., 1966, Utah State University; Ph.D., 1970, North Carolina State University

KENNETH B. DAVIS, JR. (1969), Professor: B.A., 1963, M.S., 1965, University of Arkansas; Ph.D., 1970, Louisiana State University

VICTOR FEISAL (1959), Professor, Vice President for Academic Affairs: B.S., 1958, Memphis State University; M.S., 1960, University of Houston; Ph.D., 1966, University of Georgia

T. KENT GARTNER (1976), Professor: B.S., 1960, Rutgers University; Ph.D., 1965, University of California

MARK ALLEN GRASSMAN (1987), Assistant Professor: B.A., 1975, Bethel College; M.A. 1979, University of Nebraska; Ph.D., 1984, Texas A & M University

WILLIAM H. N. GUTZKE (1986), Associate Professor: B.S., 1975, M.S., 1977, Virginia Commonwealth University; Ph.D., 1984, Colorado State University

GOLDEN LEON HOWELL (1961), Professor: B.S., 1950, M.S., 1954, Ph.D., 1959, University of Alabama

MICHAEL L. KENNEDY (1974), Professor: B.S., 1966, M.S., 1968, Memphis State University; Ph.D., 1975, University of Oklahoma

STEPHEN J. KLAINE (1982), Associate Professor: B.S., 1974, University of Cincinnati; M.S., 1981, Ph.D., 1982, Rice University

JOSEPH S. LAYNE (1965), Associate Professor: B.S., 1959, Marshall University; M.S., 1961, University of Arkansas; Ph.D., 1964, University of Mississippi Medical Center

CHARLES LESSMAN (1988), Associate Professor: B.A., 1970, M.S., 1975, Ph.D., 1980, University of Minnesota

NEIL A. MILLER (1968), Professor: B.S.F., 1958, Michigan State University; M.S., 1964, Memphis State University; Ph.D., 1968, Southern Illinois University

RONALD MUMME (1984), Assistant Professor: B.A., 1975, University of South Florida; Ph.D., 1984, University of California

DONALD D. OURTHER (1974), Professor: B.A., 1961, M.A., 1966, University of Northern Iowa; Ph.D., 1969, University of Iowa

JAMES F. PAYNE (1968), Professor, Chair: B.S., 1962, University of Tennessee at Martin; M.S., 1965, Memphis State University; Ph.D., 1968, Mississippi State University

BILL AL SIMCO (1966), Professor: B.S., 1960, College of the Ozarks, M.A., 1962, Ph.D., 1966, University of Kansas

OMAR E. SMITH (1961), Professor: B.S., 1954, Memphis State University; M.S., 1958; Ph.D., 1961, Iowa State University

S. EDWARD STEVENS, JR. (1989), Professor, Chair of Excellence in Molecular Biology: B.A., 1966, M.A., 1968, Ph.D., 1971, University of Texas, Austin

BARBARA J. TALLER (1983), Assistant Professor: B.S., 1971, Baldwin-Wallace College; Ph.D., 1978, University of Wisconsin-Madison

WALTER E. WILHELM (1964), Professor: A.B., 1955, Harris Teachers College; M.S., 1959, University of Illinois; Ph.D., 1965, Southern Illinois University

TITYE WONG (1985), Assistant Professor: B.S., 1974; M.S., 1976, Murray State University; Ph.D., 1981, University of Houston

CHEMISTRY

H. GRADEN KIRKSEY, Ph.D., Chair

PETER BRIDSON (1980), Associate Professor: B.S., 1975, Ph.D., 1978, University of London

THEODORE J. BURKEY (1985), Assistant Professor: B.S., 1976, Harvey Mudd College; M.S., 1978, Ph.D., 1982, University of California, San Diego

JAMES C. CARTER (1974), Professor: B.S.Chem., 1953, University of Oklahoma; M.S.Chem., 1955, Ph.D., 1961, University of Michigan

MARK BARRY FREILICH (1985), Assistant Professor: B.S., 1966, Brooklyn College (C.U.N.Y.); Ph.D., 1974, Purdue University

RANDY F. JOHNSTON (1987), Assistant Professor: B.S.Chem., 1980, University of Missouri, St. Louis; Ph.D., 1984, Texas Tech University

LARRY WAYNE HOUR (1968), Professor: B.S., 1963, Middle Tennessee State University; Ph.D., 1967, University of Georgia

H. GRADEN KIRKSEY (1965), Professor, Chair: B.S., 1961, Middle Tennessee State University; Ph.D., 1966, Auburn University

HENRY A. KURTZ (1983), Associate Professor: B.S., 1972, Georgia Institute of Technology; Ph.D., 1977, University of Florida

YING-SING LI (1982), Associate Professor: B.S., 1960, Cheng Kung University; Ph.D., 1968, University of Kansas

ROGER VAUGHN LLOYD (1975), Associate Professor: B.S., 1958, Pennsylvania State University; M.S., 1961, West Virginia University; Ph.D., 1971, Carnegie-Mellon University

ROBERT HERMAN MARSHALL (1960), Professor: B.S., 1947, M.S., 1950, Illinois State Normal University; Ph.D., 1954, University of Illinois

RICHARD L. PETERSEN (1980), Associate Professor: B.S., 1969, University of Wisconsin-Madison; Ph.D., 1975, University of Wisconsin-Milwaukee

CHARLES NELSON ROBINSON (1961), Professor: B.S., 1949, Maryville College; M.S., 1951, Ph.D., 1953, University of Tennessee

JAMES C. WILLIAMS (1967), Professor: B.S., 1955, Ouachita College; Ph.D., 1964, University of Missouri

WILLIAM HENRY ZUBER, JR. (1966), Associate Professor: B.S., 1960, Memphis State University; Ph.D., 1964, University of Kentucky

CRIMINOLOGY AND CRIMINAL JUSTICE

JERRY R. SPARGER, Ph.D. Chair

MICHAEL B. BLANKENSHIP (1987), Assistant Professor: B.S., 1983, M.P.A., 1984, Western Carolina University; Ph.D., 1988, Sam Houston State University

DAVID J. GIACOPASSI (1977), Professor: B.A., 1969, St. Anselm College; M.A., 1971, Ph.D., 1975, University of Notre Dame

W. RICHARD JANIKOWSKI (1988), Assistant Professor: B.A., 1979, Loyola University of Chicago; J.D., 1982, DePaul University

BYRON R. JOHNSON (1986), Assistant Professor: B.A., 1977, Minot State College; M.A., 1980, Middle Tennessee State University; M.S., 1980, University of Tennessee-Chattanooga; Ph.D., 1984, Florida State University

JAMES M. KNIGHT, SR. (1971), Associate Professor: B.S., 1963, Arkansas State University; M.Ed., 1971, Memphis State University; Ph.D., 1978, Southern Illinois University

T. PAUL LOUIS (1988), Assistant Professor: B.A., 1973, Southwestern University; M.A., 1985, Ph.D. candidate, 1989, Sam Houston State University

JAMES M. MONEYMAKER (1988), Assistant Professor: B.A., 1971, University of South Carolina; M.A., 1976, M.Phil., 1981, Ph.D., 1982, City University of New York

JERRY R. SPARGER (1974), Associate Professor, Chair: B.A., 1964, Wake Forest University; M.A., 1965, Appalachian State University; Ph.D., 1973, University of Tennessee

ENGLISH

WILLIAM H. O'DONNELL, Ph.D. Chair

CHARLENE JAYROE ALLEN (1960), Assistant Professor: B.A., 1957, Southwestern at Memphis; M.A., 1958, University of Alabama

REBECCA STOUT ARGALL (1966), Assistant Professor: B.A., 1965, Guilford College; M.A., 1966, University of North Carolina

JULIE B. BAIER (1987), Instructor: B.S., 1965, Louisiana State University; M.A., 1987, Memphis State University

MARY VROMAN BATTLE (1968), Assistant Professor: B.A., 1948, College of St. Teresa; M.A., 1954, Catholic University of America; Ed.D., 1986, Memphis State University

JOAN TURNER BEIFUSS (1989), Instructor: B.A., 1952, MacMurray College; M.A., 1963, Loyola University (Chicago)

JOHN PAUL BEIFUSS (1966), Professor: B.A., 1952, St. Mary of the Lake; M.A., 1959, Ph.D., 1964, Loyola University (Chicago)

LYNETTE COOK BLACK (1977), Associate Professor: B.A., 1961, Hendrix College; Certificate, 1962, Université de Montpellier; M.A., 1964, University of Arkansas; Ph.D., 1972, University of Nebraska

RYLAND L. BRUHWILER (1987), Instructor: B.A., 1975, Rhodes College, M.A., 1986, Memphis State University

SHARON BRYAN (1987), Associate Professor: B.A., 1965, University of Utah; M.A., 1969, Cornell University; M.F.A., 1977, University of Iowa

LAURA BURTON (1989), Instructor: B.S., 1971, University of Florida; M.A., 1989, Memphis State University

THOMAS CLARK CARLSON (1971), Professor: B.A., 1966, Bucknell University; M.A., 1969, Ph.D., 1971, Rutgers University

MARVIN K. L. CHING (1974), Professor: B.Ed., 1956, M.A., 1968, University of Hawaii; Ph.D., 1975, Florida State University

JERRY E. CLEMENTS (1989), Instructor: B.Ed., 1985, M.A., 1987, Memphis State University

FRED DARWYN COLLINS (1963), Assistant Professor: B.A., 1959, Texas A & M University; M.A., 1963, University of Mississippi

PATRICK BURRELL COLLINS (1963), Assistant Professor: B.S.E., 1960, Delta State College; M.A., 1961, University of Mississippi

PATRICIA CIRTAINT CONLEY (1987), Instructor: B.A., 1980, M.A., 1982, Memphis State University

PATRICIA ELIZABETH CONNORS (1983), Assistant Professor: B.A., 1968, Edgewood College; M.A., 1970, Xavier University; Ph.D., 1978, University of Detroit

TERESA SPROUL DALLE (1984), Assistant Professor: B.A., 1970, Memphis State University; M.S., 1974, M.A., 1975, Ph.D., 1983, University of Arizona

JOHN LASLEY DAMERON (1962), Professor: B.S., 1950, M.A., 1952, University of North Carolina; Ph.D., 1962, University of Tennessee

JOSEPH KIMBRELL DAVIS (1980), Professor: B.S., 1953, University of Southern Mississippi; M.A., 1955, University of Mississippi; Ph.D., 1960, Emory University

WILLIAM BARTLETT FRANCIS DeLOACH (1972), Assistant Professor: B.A., 1961, University of Michigan; M.A., 1965, Ph.D., 1973, University of Illinois

JOHN N. DUVALL (1987), Assistant Professor: B.A., 1978, Ohio State University; M.A., 1980, University of Delaware; Ph.D., 1986, University of Illinois

KAY PARKHURST EASSON (1977), Professor: B.A., 1962, M.A., 1968, Ph.D., 1970, University of Tulsa

JULIUS CAESAR FEAZELL (1965), Assistant Professor: B.A., 1953, University of Southern Mississippi; M.A., 1963, Vanderbilt University

SUSAN F. FITZGERALD (1989), Instructor: B.A., 1973, Harding University; M.A., 1975, Memphis State University

H. RAMSEY FOWLER, (1968), Associate Professor; Dean, University College; A.B., 1959, Princeton University; A.M.T., 1961, Harvard University; Ph.D., 1968, University of Michigan

YVONNE LOUISE GIEM (1964), Assistant Professor: B.A., 1961, Memphis State University; M.A., 1964, University of Arkansas

PATRICIA W. GINN (1989), Instructor: B.A., 1987, M.A., 1988, Memphis State University

CHARLES EDWARD HALL, JR. (1984), Assistant Professor: B.A., 1976, Oakland University; M.A., 1979, University of Florida

FLORENCE SCHENKER HALLE (1965), Assistant Professor: B.A., 1958, M.A., 1965, Memphis State University

CLAUDIA J. HIBRIL (1988), Assistant Professor: B.A., 1979, St. Norbert College; M.A., 1982, Syracuse University

VIRGINIA PEARCE HUGGENS (1965), Assistant Professor: B.A., 1959, Union University; M.A., 1963, University of Mississippi

LEA P. JACOBSON (1989), Instructor: B.A., 1987, Baylor University; M.A., 1988, Memphis State University

JEAN W. JOHNSON (1987), Instructor: B.A., 1969, University of Arkansas; M.A., 1971, Vanderbilt University

M. JIMMIE KILLINGSWORTH (1988), Associate Professor: B.A., 1974, M.A., 1976, Ph.D., 1979, University of Tennessee

JANE DLUGAC LETTES (1987), Instructor: B.S., 1960, M.A., 1985, Memphis State University

LYNN C. LEWIS (1988), Instructor: B.A., 1974, Earlham College; M.A., 1979, Tennessee State University; M.B.A., 1983, Columbia University

CHARLES E. LONG, JR. (1957), Professor of English and German Philology: B.A., 1951, Henderson State Teachers College; M.A. (English), 1955, M.A. (German), 1956, Ph.D., 1963, University of Arkansas

MARY SUE MACNEALY (1988), Assistant Professor: B.A., 1979, M.A., 1982, Ohio State University; Ph.D., 1988, Carnegie Mellon University

LEE ROY MARTIN (1987), Instructor: B.A., 1978, M.A., 1979, Eastern Illinois University; M.F.A., 1984, University of Arkansas

REGINALD MARTIN (1983), Associate Professor: B.S., 1977, Boston University; M.A., 1979, Memphis State University; Ph.D., 1985, University of Tulsa

LORETTA McBRIDE (1987), Instructor: B.A., 1972, University of Southern Mississippi; M.A., 1986, M.A.T., 1987, Memphis State University

RONALD L. METZLER (1988), Instructor: B.A., 1977, Goshen College; M.A., 1980, Southern Illinois University

PATRICIA A. MEYERS (1989), Instructor: B.A., 1978, University of Louisville; M.A., 1988, Memphis State University

MARKESAN MORRISON (1965), Instructor: B.A., 1959, Southwest at Memphis; M.A., 1962, University of Mississippi

JAMES W. NEWCOMB (1972), Associate Professor: B.A., 1963, M.A., 1965, Creighton University; Ph.D., 1974, University of Iowa

WILLIAM H. O'DONNELL (1986), Professor, Chair: B.A., 1962, University of Washington; M.A., 1969, Ph.D., 1971, Princeton University

GORDON THOMAS OSING (1973), Associate Professor: B.S.E., 1962, Concordia Teachers College; M.S.E., 1971, Central Missouri State, M.F.A., 1973, University of Arkansas

ROBIN L. OWENS (1989), Instructor: B.A., 1987, M.A., 1989, Memphis State University

HENRY HALL PEYTON (1967), Professor: B.A., 1950, M.A., 1953, Baylor University; Ph.D., 1968, Brown University

SANDRA PHILLIPS (1989), Instructor: B.A., 1982, M.A., 1984, Memphis State University

MARY ELLEN PITTS (1965), Associate Professor: B.S., 1960, Florence State College; M.A., 1962, Ph.D., 1985, University of Florida

DEBORAH G. PLANT (1988), Assistant Professor: B.A., 1978, Southern University; M.A., 1980, Atlanta University; M.A., 1984, Ph.D., 1988, University of Nebraska
GENE ALAN PLUNKA (1983), Assistant Professor: B.A., 1971, University of Maryland-Baltimore County; M.A., 1972, Ph.D., 1978, University of Maryland-College Park
KENNETH TYLER RAINHEY (1983), Assistant Professor: B.A., 1958, Mississippi College; M.A., 1959, University of Michigan; Th.D., 1967, New Orleans Baptist Theological Seminary; Ph.D., 1976, Ohio State University
JOSEPH RAYMOND RILEY (1954), Professor: B.S., 1949, Memphis State University; M.A., 1953, Ph.D., 1962, Vanderbilt University
THOMAS LYON RUSSELL (1984), Associate Professor: B.A., 1968, M.A., 1974, Ph.D., 1981, University of Kansas
NASEEB SHAHEEN (1969), Professor: B.A., 1962, American University of Beirut; M.A., 1965, Ph.D., 1969, University of California at Los Angeles
GLENDON N. SHORR (1987), Instructor: B.A., 1981, Old Dominion University; M.A., 1987, Memphis State University
LOUIS CHARLES STAGG (1962), Professor: B.A., 1955, Louisiana College; M.A., 1957, Ph.D., 1963, University of Arkansas
CYNTHIA GRANT TUCKER (1967), Professor: B.A., 1963, Denison University; Ph.D., 1967, University of Iowa
MARY JOAN WEATHERLY (1965), Professor: B.A., 1957, M.A., 1960, Mississippi College; Ph.D., 1973, University of Alabama
LESLIE D. WEAVER (1987), Instructor: B.A., 1977, Weber State College; M.A., 1986, Memphis State University
ELIZABETH B. WEBB (1987), Instructor: B.A., 1979, M.A., 1982, Louisiana State University
DANIEL RAY WILLBANKS (1965), Professor: B.A., 1963, M.A., 1964, University of Alabama; Ph.D., 1973, University of Texas
ELSIE PATRICIA WILLIAMS (1987), Instructor: B.A., 1978, M.A., 1981, Memphis State University
WILLIAM ROBERT WILLIAMS (1961), Assistant Professor: B.A., 1957, Lambuth College; M.A., 1961, Memphis State University
HELEN M. WUSSOW (1989), Assistant Professor: B.A., 1982, Moorhead State University; M.A., 1988, Ph.D., 1989, University of Oxford

FOREIGN LANGUAGES AND LITERATURES

NICHOLAS W. ROKAS, Ph.D., *Interim Chair*

WILLIAM B. BREWER (1961), Professor of Spanish: B.A., 1958, Memphis State University; M.A., 1959, Ph.D., 1966, Tulane University
FERNANDO BURGOS (1981), Professor of Spanish: B.S., 1970, M.A., 1973, University of Chile; Ph.D., 1980, University of Florida
PAMELA CARMELL (1988), Instructor of Spanish: B.S., 1972, M.A., 1975, University of Missouri
LEO A. CONNOLLY (1975), Professor of German and Linguistics: B.A., 1963, Seton Hall University; M.A., 1970, Ph.D., 1973, New York University
CHERYL ANNE COX (1984), Assistant Professor of Classics: B.A., 1976, York University, Toronto, Canada; Ph.D., 1983, Duke University
MARY JANE FENWICK (1976), Assistant Professor of Spanish: B.A., 1962, Indiana University; M.A., 1971, Ph.D., 1979, University of Minnesota
JOSE LUIS FREIRE (1975), Associate Professor of Spanish and Linguistics: B.A., 1961, Orense, Spain; M.A., 1969, M.A., 1970, University of Northern Iowa; Ph.D., 1975, University of Michigan
SHARON HARWOOD-GORDON (1972), Professor of French and Italian: B.A., 1966, M.A., 1967, Memphis State University; M.A., 1972, Ph.D., 1973, Tulane University
BEVERLY J. INMAN (1989), Instructor of German: B.A., 1966, Coe College; M.A., 1969, Ph.D., 1984, University of Iowa
SUSAN M. JOHNSON (1985), Assistant Professor of French: B.A., 1973, University of Chicago; M.A., 1975, Michigan State University; M.L.S., 1983, Ph.D., 1983, Indiana University
FELIPE-ANTONIO LAPUENTE (1970), Professor of Spanish: B.A., 1957, M.A., 1959, University of Madrid; Ph.D., 1967, St. Louis University
RICHARD C. MARCUS (1989), Instructor of French: M.A., 1986, Indiana University
RAYMONDE MARTHA NIEL (1969), Assistant Professor of French: B.A., 1965, Montclair State College; M.S., 1966, Oklahoma State University; M.A., 1969, M.Phil., 1975, Ph.D., 1977, University of Kansas
JENNIFER E. ORLIKOFF (1988), Instructor of French: M.A., 1985, Rutgers University
NICHOLAS WILLIAM ROKAS (1969), *Interim Chair*, Associate Professor of Spanish: B.A., 1957, Texas Christian University; M.A., 1961, University of Oklahoma; Ph.D., 1972, University of Missouri
GREGORY B. STONE (1987), Assistant Professor of Spanish and Linguistics: B.A., 1973, Ph.D., 1980, University of Texas
ANTONIO TORRES—ALCALA (1987), Associate Professor of Spanish: Licenciado, Universidad de Barcelona, 1965; M.A., 1969, Ph.D., 1974 Catholic University of America
DAVID L. SIGSBEE (1976), Associate Professor of Classics: B.A., 1960, Concordia Senior College, Ft. Wayne, Indiana; M.A., 1961, Ph.D., 1968, University of Michigan
ROBERT VICTOR SMYTHE (1963), Assistant Professor of German: B.A., 1962, Memphis State University; M.A., 1963, Ph.D., 1980, University of Texas

WILLIAM THOMPSON (1989), Assistant Professor of French: B.A., 1983, M.A., 1984, McMaster University, Canada; Ph.D., 1989, Cornell University
RICHARD WARGA (1988), Instructor of Classics: B.A., 1970, B.A. (Classics), 1980, UNC Greensboro; A.M. (Classics), 1982, Ph.D., 1988, University of Illinois
ROY E. WATKINS (1957), Professor Emeritus of Classical Languages: B.A., 1933, Luther College; M.A. (Classics), 1934, M.A. (German), 1952, Ph.D. (Classics), 1940, University of Iowa
DAVID GORDON WILSON (1988), Assistant Professor of Russian: B.A., 1973, University of Missouri; M.A., 1984, Ph.D., 1986, University of Kansas

GEOGRAPHY AND PLANNING

W. THEODORE MEALOR, JR., Ph.D., *Chair*

A. REZA BANAI—KASHANI (1983), Associate Professor: B.Arch., 1973, Miami University; M.Arch., 1975, Virginia Polytechnic Institute; Ph.D., 1983, University of Pennsylvania
MELVIN C. BARBER (1959), Associate Professor, Acting Chair: B.S., 1958, Memphis State University; M.A., 1959, George Peabody College; Ph.D., 1971, Southern Illinois University
MICHAEL L. BARNHARDT (1983), Assistant Professor: B.A., 1971, Weber State College; M.S., 1973, University of Utah; Ph.D., 1979, University of Illinois-Urbana
STEVEN C. BOURASSA (1986), Assistant Professor: B.A., 1977, University of Delaware; M.A., 1982, Temple University; Ph.D., 1986, University of Pennsylvania
LUZ de SELENA BURRELL (1977), Assistant Professor: B.B.A., 1968, University of Puerto Rico; M.P., 1970, University of Puerto Rico
JOHN H. CORBET (1958), Associate Professor: B.S., 1953, M.A., 1954, Memphis State University; Ph.D., 1966, University of Florida
CLIFTON V. DIXON (1986), Assistant Professor: B.S., 1976, M.A., 1980, Louisiana State University; Ph.D., 1988, Texas A & M University
HOWARD EDWARD FRYE (1955), Assistant Professor: B.S., 1951, Eastern Michigan University; M.A., 1954, University of Michigan
SCOTT W. KIRSCH (1989), Assistant Professor: M.A., 1984, Indiana University
HSIANG-TE KUNG (1981), Associate Professor: B.S., 1968, University of Chinese Culture; M.S., 1972, Ph.D., 1980, University of Tennessee (Knoxville)
JEFFREY A. LOGSDON (1988), Instructor: B.S., 1986, M.S., 1988, Northern Illinois University
W. THEODORE MEALOR, JR. (1978), Professor, Associate Vice President for Academic Affairs, Chair: B.A., 1962, University of Florida; M.A., 1964, Ph.D., 1972, University of Georgia
EARL E. PEARSON, JR. (1971), Associate Professor: Director of Graduate Program in City and Regional Planning: B.P.A., 1966, M.U.R.P., 1971, University of Mississippi
CHARLES T. TRAYLOR (1979), Associate Professor, Director, Cartographic Services Laboratory: B.S., 1969, M.S., 1971, University of Alabama; Ph.D., 1979, University of Kansas

GEOLOGICAL SCIENCES

PHILI B. DEBOO, Ph.D., *Chair*

JER-MING CHIU (1982), Associate Professor: B.S., 1971, National Taiwan Normal University; M.S., 1974, National Central University, Taiwan; Ph.D., 1982, Cornell University
WAI—YING CHUNG (1986), Associate Professor: B.S., 1970, National Taiwan Normal University; M.S., 1972, National Central University-Taiwan; Ph.D., 1978, California Institute of Technology
TIMOTHY CLARKE (1988), Assistant Professor: B.A., 1976, Ph.D., 1982 Cambridge University
PHILI B. DEBOO (1965), Professor, Chair: B.S., 1953, St. Xavier's College; M.S., 1955, Ph.D., 1963, Louisiana State University
JAMES DORMAN (1987), Professor, Associate Director, Center for Earthquake Research and Information: B.A., 1949, Carlton College; M.S., 1951, Northwestern University; Ph.D., 1961, Columbia University
ARCHIBALD C. JOHNSTON (1978), Professor, Director, Center for Earthquake Research and Information: B.S., 1967, Rhodes College; Ph.D., 1978, University of Colorado
LISA KANTER (1985), Assistant Professor: B.S., 1976, University of Massachusetts; Ph.D., 1983 Stanford University
DAVID NORMAN LUMSDEN (1967), Professor: B.A., 1958, M.A., 1960, State University of New York at Buffalo; Ph.D., 1965, University of Illinois
JUNE E. MIRECKI (1989), Assistant Professor: B.S., 1980, Farleigh Dickinson University; M.S., 1982, William and Mary; M.S., 1985, Ph.D., 1990, University of Delaware
JOSE PUJOL (1985), Assistant Professor: B.S., 1968, Universidad del Sur, Argentina; M.S., 1982, University of Alaska; Ph.D., 1985, University of Wyoming
EUGENE S. SCHWEIG (1985), Assistant Professor: B.S., 1975, University of Missouri; M.S., 1983, Ph.D., 1985, Stanford University
PRADIP KUMAR SEN GUPTA (1966), Professor: B.Sc., 1956, University of Calcutta; M.Sc., 1958, Jadavpur University; M.Tech., 1960, Indian Institute of Technology; Ph.D., 1964, Washington University

GEORGE SWIHART (1988), Assistant Professor: A.B., 1979, Colby College; M.S., 1981, University of Iowa. Ph.D., 1987, University of Chicago

HISTORY

ABRAHAM DAVID KRIEGEL, Ph.D., *Chair*

WALTER ROBERT BROWN (1965), Associate Professor: B.A., 1962, Millsaps College; M.A., 1963, Ph.D., 1973, Emory University
MARGARET M. CAFFREY (1988), Assistant Professor: B.A., 1969, College Misericordia; M.A., 1979, Ph.D., 1986, University of Texas
JAMES ROBERT CHUMNEY, JR. (1965), Associate Professor: B.S., 1957, Memphis State University; M.A., 1961, Trinity University; Ph.D., 1964, Rice University
DALVAN M. COGER (1965), Associate Professor: B.A., 1960, University of Maryland; M.A., 1965, Ph.D., 1970, University of South Carolina
CHARLES WANN CRAWFORD (1962), Professor: B.A., 1953, Harding College; M.A., 1958, University of Arkansas; Ph.D., 1968, University of Mississippi
MAURICE A. CROUSE (1962), Professor: B.S., 1956, Davidson College; M.A., 1957, Ph.D., 1964, Northwestern University
MARTIN WILLIAM DALY, JR. (1987), Associate Professor: B.A., 1972, McGill University; M.A., 1974, Ph.D., 1977, University of London
DONALD W. ELLIS (1970), Assistant Professor: B.A., 1955, Oklahoma City University; M.A., 1958, University of Oklahoma; Ph.D., 1970, University of Kansas
JAMES EDWARD FICKLE (1968), Professor: B.S., 1961, Purdue University; M.A., 1963, Ph.D., 1970, Louisiana State University
ROBERT J. FRANKLE (1970), Associate Professor: B.A., 1963, St. Olaf College; M.A., 1965, Ph.D., 1970, University of Wisconsin
WILLIAM R. GILLASPIE (1961), Professor: B.A., 1952, Westminster College; M.A., 1954, University of Missouri; Ph.D., 1961, University of Florida
JOSEPH M. HAWES (1984), Professor: A.B., 1960, Rice University; M.A., 1962, Oklahoma State University; Ph.D., 1969, University of Texas
FORREST JACK HURLEY (1966), Professor: B.A., 1962, Austin College; M.A., 1966, Ph.D., 1971, Tulane University
BERKLEY KALIN (1966), Associate Professor: B.A., 1956, Washington University; M.A., 1960, Ph.D., 1967, St. Louis University
ABRAHAM DAVID KRIEGEL (1964), Professor, Chair: B.A., 1958, Hunter College; M.A., 1960, Ph.D., 1965, Duke University
KELL FREEMAN MITCHELL, JR. (1963), Associate Professor: B.A., 1957, M.A., 1960, Ph.D., 1966, University of Georgia
WILLIAM JOSEPH MURNANE, JR. (1987), Associate Professor: B.A., 1966, St. Anselm's College; M.A. 1968, Ph.D., 1973, University of Chicago
MARCUS W. ORR (1959), Professor: B.A., 1952, Rhodes College, M.A., 1956, Ph.D., 1958, University of Illinois
CARL EDWARD SKEEN (1968), Professor: B.S., 1959, Ohio University, M.A., 1960, Ph.D., 1966, Ohio State University
GERALD L. SMITH (1988), Assistant Professor: B.A., 1981, M.A., 1983, Ph.D., 1988, University of Kentucky
DAVID MILTON TUCKER (1965), Professor: B.A., 1959, College of the Ozarks; M.A., 1961, Oklahoma State University; Ph.D., 1965, University of Iowa
MAJOR LOYCE WILSON (1964), Professor: B.A., 1950, Vanderbilt University; M.A., 1953, University of Arkansas; Ph.D., 1964, University of Kansas

MATHEMATICAL SCIENCES

RALPH J. FAUDREE, JR., Ph.D., *Chair*

GEORGE A. ANASTASSIOU (1986), Associate Professor: B.A., 1975, University of Athens, Greece; M.A., 1981, Ph.D., 1984, University of Rochester
THOMAS J. BARTON (1984), Associate Professor: M.A., 1980, Ph.D., 1984, Kent State University
RUTH I. BERGER (1988), Assistant Professor: M.S., 1985, Ph.D., 1988, Louisiana State University
MARIA F. BOTELHO (1988), Assistant Professor: M.S., 1980, University of Porto; Ph.D., 1988, University of California, Berkeley
SAM RAYMOND BROOKS (1966), Assistant Professor: B.A., 1962, M.A., 1964, Ph.D., 1969, University of Texas
JAMES T. CAMPBELL (1984), Assistant Professor: B.S., 1978, Georgia Institute of Technology; M.S., 1982, Ph.D., 1984, University of North Carolina-Chapel Hill
THOMAS RAY CAPLINGER (1964), Associate Professor: B.A., 1961, Hendrix College; M.S., 1962, Florida State University; Ph.D., 1972, University of Mississippi
KWOK HUNG CHAN (1988), Assistant Professor: B.A., 1974, M.A., 1979, Chinese University of Hong Kong; Ph.D., 1986, University of Western Ontario
LIH-YUAN DENG (1984), Assistant Professor: B.S., 1975, M.S., 1977, National Taiwan University; M.S., 1979, Purdue University; M.S., 1982, Ph.D., 1984, University of Wisconsin-Madison

DAVID P. DWIGGINS (1989), *Instructor*: B.S., 1980, Rhodes College; M.S., 1984, Memphis State University

PAUL ERDOS (1979), *Adjunct Professor*: Ph.D., 1933, University of Budapest

RALPH J. FAUROREE, JR. (1971), *Professor, Chair*: B.S., 1961, Oklahoma Baptist University; M.S., 1963, Ph.D., 1964, Purdue University

MICHAEL R. FISHER, JR. (1988), *Adjunct Professor*: B.S., 1975, Christian Brothers College; M.S., 1977, Memphis State University; Ph.D., 1987, Massachusetts Institute of Technology

STANLEY PHILLIP FRANKLIN (1972), *Professor*: B.S., 1959, Memphis State University; M.S., 1962, Ph.D., 1963, University of California at Los Angeles

MAXIMILIANO H. GARZON (1984), *Associate Professor*: M.S., 1980, Ph.D., 1984, University of Illinois at Urbana

EBENEZER O. GEORGE (1983), *Associate Professor*: B.A., 1968, Harvard University; M.S., 1972, University of Illinois; Ph.D., 1977, University of Rochester

MARYLYN A. GLOVER (1989), *Instructor*: B.A., 1966, University of Michigan; M.S., 1984, Memphis State University

JOHN R. HADDOCK (1970), *Professor*: B.A., 1966, M.S., 1968, Ph.D., 1970, Southern Illinois University

HUANG HSU (1987), *Assistant Professor*: B.S., 1975, M.S., 1977, National Central University Taiwan; Ph.D., 1985, Stanford

JAMES E. JAMISON (1970), *Professor*: B.S., 1965, M.S., 1967, Ph.D., 1970, University of Missouri (Rolla)

ANTONY K. KONG (1982), *Adjunct Professor*: B.S., 1973, Iowa State University; Ph.D., 1977, University of Illinois

PEI-KEE LIN (1986), *Assistant Professor*: B.S., 1973, Tsing Hua University; M.S., 1981, Ph.D., 1980, Ohio State University

HUGH LANSDEN MCHENRY (1968), *Associate Professor*: B.S., 1960, Tennessee Technological University; M.A., 1961, Ph.D., 1970, George Peabody College

GERHARD METZEN (1984), *Assistant Professor*: B.Sc., 1978, Concordia University; M.Math., 1979, University of Waterloo; Ph.D., 1984, University of California

HUBERT LEE MINTON, JR. (1965), *Assistant Professor*: B.A., 1955, M.A., 1961, University of Texas

GODFREY C. MUGANDA (1985), *Assistant Professor*: B.S., 1979, Eastern Mennonite College; M.S., 1980, College of William and Mary; M.S. 1982, Ph.D., 1984, Lehigh University

GIRI NARASIMHAN (1989), *Assistant Professor*: B.T.E.E., 1982, Institute of Technology, Bombay, India; Ph.D., 1989, University of Wisconsin-Madison

MUBENGWA N. NIKASHAMA (1986), *Associate Professor*: B.S., 1976, National University of Zaire; M.S., 1980, Ph.D., 1980, University of Louvain, Belgium

EDWARD T. ORDMAN (1983), *Associate Professor*: A.B., 1964, Kenyon College; A.M., 1966, Ph.D., 1969, Princeton University

MEREDITH POOLE (1955), *Assistant Professor*: B.A., 1950, M.A., 1955, University of Mississippi

CECIL C. ROUSSEAU (1970), *Professor*: B.S., 1980, Lamar State College of Technology; M.S., 1962, Ph.D., 1968, Texas A&M University

RICHARD H. SCHELP (1970), *Professor*: B.S., 1959, Central Missouri State College; M.S., 1961, Ph.D., 1970, Kansas State University

WILLIAM R. SCHMITT (1989), *Assistant Professor*: B.S., 1982, University of Vermont; Ph.D., 1986, Massachusetts Institute of Technology

GRANT W. SOMMES (1988), *Adjunct Professor*: B.A., 1968, Indiana University; Ph.D., 1975, University of Kentucky

EVERETT EARL STEVENSON (1969), *Professor*: B.S., 1944, State College of New York at Buffalo; M.Ed., 1952, University of Houston; Ph.D., 1961, Ohio State University

YUAN Y. SUNG (1987), *Associate Professor*: B.S., 1973, National Taiwan University; M.S., 1979, Ph.D., 1983, University of Minnesota

WAI-YUAN TAN (1975), *Professor*: B.S., 1956, Provincial College, Taiwan; M.S., 1959, National Taiwan University; M.S., 1963, Ph.D., 1964, University of Wisconsin

PAUL B. TROW (1987), *Assistant Professor*: B.A., 1978, Carleton College; Ph.D., 1985, University of North Carolina

DAVID M. VAUGHT (1969), *Professor*: B.S., 1949, Rhodes College; Ph.D., 1964, University of Utah

SEOK PIN WONG (1965), *Professor*: M.S., 1962, University of Delaware; Ph.D., 1967, University of Illinois

PHILOSOPHY

NANCY SIMCO, Ph.D., *Chair*

ROBERT L. BERNASCONI (1988), *Moss Professor of Philosophy*: B.A., 1972, Ph.D., 1982, Sussex University

TERENCE E. HORGAN (1981), *Professor*: B.A., 1970, Stanford University; Ph.D., 1974, University of Michigan

GENE G. JAMES (1964), *Professor*: B.A., 1959, Wake Forest University; Ph.D., 1969, University of North Carolina

LEONARD LAWLOR (1989), *Assistant Professor*: B.A., 1978, Eastern Michigan University; Ph.D., 1988, State University of New York, Stony Brook

THOMAS NENON (1985), *Assistant Professor*: B.A., 1972, Regis College; M.A., 1974, Boston College; Ph.D., 1983, University of Freiburg

HOKE ROBINSON (1981), *Associate Professor, Chair*: B.A., 1969, George Washington University; M.A. 1971, University of Texas; Ph.D., 1978, State University of New York, Stony Brook

TIMOTHY ROCHE (1985), *Assistant Professor*: B.A., 1974, Washington and Lee University; M.A., 1980, Ph.D., 1984, University of California-Davis

NANCY DAVIS SIMCO (1966), *Professor, Chair*: B.A., 1962, M.A., 1985, Ph.D., 1969, University of Kansas

JOHN L. TIENSON (1987), *Associate Professor*: B.A., 1963, University of California, Berkeley; M.A., 1966, Ph.D., 1970, University of Illinois, Urbana

MARK TIMMONS (1989), *Associate Professor*: B.A., 1973, University of Evansville; M.A., 1975, Arizona State University; Ph.D., 1982, University of Nebraska

PHYSICS

DONALD R. FRANCESCHETTI, Ph.D., *Chair*

B. N. NARAHARI ACHAR (1984), *Professor*: B.Sc., 1960, Mysore University, India; M.S., 1965, Ph.D., 1968, Pennsylvania State University

W. EUGENE COLLINS (1987), *Professor*: B.S., 1968, Christian Brothers College, M.S., 1970, Ph.D., 1972, Vanderbilt University

DONALD R. FRANCESCHETTI (1979), *Professor, Chair*: B.S., 1969, Brooklyn College of the City University of New York; M.A., 1971, Ph.D., 1974, Princeton University

MICHAEL MCKEE GARLAND (1965), *Professor*: B.A., 1961, Austin Peay State University; Ph.D., 1965, Clemson University

JOHN W. HANNEKEN (1979), *Associate Professor*: B.S., 1971, Ohio University; M.S., 1974, University of Houston; M.A., 1977, Ph.D., 1979, Rice University

M. SHAH JAHAN (1980), *Professor*: B.S., 1963, M.S., 1964, Rajshahi University (Bangladesh); Ph.D., 1977, The University of Alabama

D. WAYNE JONES (1969), *Associate Professor*: B.S., 1960, Memphis State University; M.S., 1962, Ph.D., 1966, University of Virginia

ROBERT RIGGS MARCHINI (1968), *Professor*: B.S., 1962, DePaul University; Ph.D., 1969, Clemson University

LEWIS B. O'KELLY (1962), *Assistant Professor*: B.S., 1957, Memphis State University; M.S., 1960, Vanderbilt University

DAVID L. PRICE (1989), *Assistant Professor*: B.S., 1978, State University of New York Brockport; Ph.D., 1986, University of Minnesota

CECIL G. SHUGART (1977), *Professor*: B.A., 1957, North Texas State University; M.A., 1961, Ph.D., 1968, University of Texas at Austin

ALBERT HAINES WOOLLETT (1963), *Associate Professor*: B.A., 1949, M.S., 1950, University of Mississippi; Ph.D., 1956, University of Oklahoma

POLITICAL SCIENCE

JAMES D. KING, Ph.D., *Chair*

DAVID N. COX (1978), *Associate Professor*: B.A., 1965, Ball State University; M.A., 1968, University of Queensland, Australia; Ph.D., 1977, Indiana University

WALTER J. JONES (1980), *Associate Professor*: B.A., 1974, Pennsylvania State University; M.A., 1975, Ph.D., 1980, University of Wisconsin-Madison

GEORGE K. KIEH, JR. (1988), *Assistant Professor*: B.A., 1980, University of Liberia; M.A., 1982, Ph.D., 1986, Northwestern University

JAMES D. KING (1981), *Associate Professor, Chair*: B.A., 1974, Michigan State University; M.A., 1977, Western Michigan, Ph.D., 1983, University of Missouri-Columbia

J. HARVEY LOMAX (1977), *Associate Professor*: B.A., 1970, Furman University; M.A., 1973, Ph.D., 1979, University of Chicago

HARRY RICHARD MAHODD (1964), *Professor*: B.A., 1951, M.A., 1952, University of Oklahoma; Ph.D., 1960, University of Illinois

WILLIAM RAY MARTY (1965), *Professor*: B.A., 1960, University of Oklahoma; M.A., 1964, Ph.D., 1968, Duke University

WINSOR CHASE SCHMIDT (1986), *Professor*: A.B., 1970, Harvard University; J.D., 1973, The American University; LL.M., 1984, University of Virginia

H. PIERRE SECHER (1975), *Professor*: B.A., 1947, M.A., 1949, Ph.D., 1954, University of Wisconsin

CAROLE FRANK SOUTHERLAND (1974), *Assistant Professor*: B.S., 1959, University of Dubuque; M.A., 1970, Ph.D., 1974, University of Wisconsin-Milwaukee

PSYCHOLOGY

FRANK C. LEEMING, Ph.D., *Chair*

JEFFREY S. BERMAN, (1985), *Associate Professor*: B.A., 1972, Reed College; A.M., 1976, Ph.D., 1979, Harvard University

JOHN LAURENCE BERNARD (1967), *Professor*: B.A., 1958, M.A., 1959, Ph.D., 1962, University of Alabama

JERRY N. BOONE (1977), *Professor*: B.A., 1949, University of Mississippi; M.A., 1951, University of Florida; Ph.D., 1961, Vanderbilt University

BRUCE ALBERT BRACKEN (1986), *Professor*: B.A., 1975, College of Charleston; M.A., 1977, Ph.D., 1979, University of Georgia

EDDIE M. CLARK (1987), *Assistant Professor*: B.A., 1979, Northwestern University; M.A., 1983, Ph.D., 1988, Ohio State University

ROBERT COHEN (1976), *Professor*: B.A., 1970, University of Virginia; M.A., 1972, Ph.D., 1975, Miami University (Ohio)

JOHN R. DILL (1978), *Associate Professor, Associate Vice President for Academic Affairs*: B.S., 1964, Howard University; M.A., 1966, Columbia University; Ph.D., 1971, New York University

WILLIAM ORRINGTON DWYER (1969), *Professor*: B.A., 1964, College of Wooster; M.A., 1968, Ph.D., 1969, Southern Illinois University

THOMAS KEVIN FAGAN (1976), *Professor*: B.S.Ed., 1965, M.A., 1966, Ph.D., 1969, Kent State University

BARRY GHOLSON (1974), *Professor*: B.A., 1964, Kent State University; M.A., 1967, Ph.D., 1968, University of Iowa

ARTHUR C. GRESSER (1985), *Professor*: B.A., 1972, Florida State University; Ph.D., 1977, University of California-San Diego

ARTHUR CANTRELL HOUTS (1981), *Associate Professor*: B.A., 1970, Hampden-Sydney College; M.A., 1979, Ph.D., 1981, State University of New York at Stony Brook

PRABHA KHANNA (1969), *Professor*: B.A., 1945, Kinnaird College (Lahore, India); M.A., 1948, Punjab University (Lahore); Ph.D., 1957, University of Colorado

ROBERT C. KLESGES (1985), *Associate Professor*: B.A., 1976, Peppermint University; M.S., 1978, Ph.D., 1980, University of Wyoming

ROGER JAMES KRUZ (1988), *Assistant Professor*: B.A., 1983, University of Toledo; M.A., 1985, Ph.D., 1987, Princeton University

FRANK CRAGG LEEMING (1963), *Professor, Chair*: B.S., 1958, University of Illinois; M.A., 1961, Ph.D., 1963, University of Mississippi

KENNETH LAWRENCE LICHSTEIN (1976), *Professor*: B.B.A., 1968, City College of New York; Ph.D., 1976, University of Tennessee

CHARLES JOSEPH LONG (1967), *Professor*: B.S., 1960, M.A., 1962, Memphis State University; Ph.D., 1966, Vanderbilt University

MICHAEL BURKE LUPFER (1964), *Professor*: B.S., 1959, Rhodes College; M.S., 1963, Ph.D., 1964, University of Miami (Florida)

SHIRLEY LAND LUPFER (1963), *Assistant Professor*: B.A., 1959, Coker College; M.A., 1961, Vanderbilt University

WILLIAM MARKS (1986), *Assistant Professor*: San Francisco State University; M.A., 1977, Ph.D., 1983, University of California-Davis

ANDREW WILLIAM MEYERS (1976), *Professor*: B.A., 1970, University of Rochester; M.S., 1972, Ph.D., 1974, Pennsylvania State University

SAM BURGE MORGAN (1978), *Professor*: B.S., 1959, Memphis State University; M.A., 1962, Ph.D., 1964, University of Arkansas

ROBERT ALLEN NEIMEYER (1983), *Associate Professor*: B.A., 1976, University of Florida; Ph.D., 1982, University of Nebraska

NAFTALI RAZ (1989), *Assistant Professor*: B.A., 1979, Hebrew University; Ph.D., 1985, University of Texas

MICHAEL J. RENNER (1988), *Assistant Professor*: B.A., 1977, Boise State University; M.S., 1979, Ph.D., 1984, University of California, Berkeley

WILLIAM RAYMOND SHADISH, JR. (1981), *Associate Professor*: B.A., 1972, Santa Clara University; M.S., 1975, Ph.D., 1978, Purdue University

MILTON A. TRAPOLD (1979), *Professor*: B.A., 1958, Yale University; M.A., 1961, Ph.D., 1961, State University of Iowa

ROBERT NICHOLAS VIDULICH (1966), *Professor*: B.A., 1954, Hartwick College; M.A., 1956, Ph.D., 1958, Michigan State University

JEANNETTE POOLE WARD (1967), *Professor*: A.B., 1963, Birmingham-Southern College; Ph.D., 1969, Vanderbilt University

SOCIOLOGY AND

SOCIAL WORK

REBECCA F. GUY, Ph.D., *Chair*

CAROLYN JUNIOR BRYANT (1989), *Assistant Professor*: B.A., 1975, University of Montevallo; M.S.S.W., 1976, University of Louisville

LYNN W. CANNON (1976), *Professor*: B.A., 1971, M.A., 1973, Memphis State University; Ph.D., 1976, University of Illinois

BETTY DAWSON (1976), *Associate Professor*: B.S., 1965, Louisiana College; M.S.S.W., 1970, University of Louisville; Ed.D., 1986, Memphis State University

BONNIE T. DILL (1978), *Associate Professor*: B.A., 1965, University of Rochester; M.A., 1970, Ph.D., 1979, New York University

GREGORY V. DONNENWERTH (1974), *Professor*: B.A., 1965, Buena Vista College; M.A., 1966, University of South Dakota; Ph.D., 1971, University of Missouri

GRAVES E. ENCK (1974), *Assistant Professor*: B.A., 1961, North Texas State University; M.A., 1968, Texas Christian University; Ph.D., 1975, Yale University

J. REX ENOCH (1969), *Associate Professor*: B.S., 1959, Union University; M.A., 1960, University of Arkansas; Ph.D., 1965, University of Texas

REBECCA F. GUY (1971), *Professor, Chair*: B.A., 1968, Phillips University; M.A., 1970, Ph.D., 1971, Oklahoma State University



CHARLES S. HENDERSON (1963), Associate Professor: B.A., 1952, Vanderbilt University; M.A., 1953, George Peabody College

LIZABETH S. HIGGINBOTHAM (1985), Associate Professor: B.A., 1971, City College of the City University of New York; M.A., 1975, Ph.D., 1980, Brandeis University

ORRIS D. KLASS (1977), Professor of Social Work, Director, Division of Social Work: A.B., 1949, M.S.W., 1951, U.C.L.A.; D.S.W., 1967, University of Southern California

ERRY B. MICHEL (1970), Professor: B.A., 1954, Texas A&M University; M.A., 1960, Texas Christian University; Ph.D., 1964, University of Texas

ARRY R. PETERSEN (1977), Professor: B.A., 1972, M.A., 1974, Ph.D., 1977, Washington State University

AMES D. PRESTON (1971), Professor: B.S., 1962, Middle Tennessee State University; M.A., 1964, Ph.D., 1967, Mississippi State University

PETER TAKAYAMA (1967), Professor: B.A., 1954, Tokyo Kyo University; M.A., 1961, Fordham University; Ph.D., 1971, Southern Illinois University

MICHAEL F. TIMBERLAKE (1977), Associate Professor: B.A., 1973, University of Denver; M.A., 1975, Ph.D., 1979, Brown University

MARYL S. TUKUFU (1986), Assistant Professor: A.B., 1976, Youngstown State University; M.A., 1977, Ph.D., 1984, University of Akron

JOSEPH C. VENTIMIGLIA (1981), Associate Professor: B.A., 1967, M.A., 1968, Indiana University; Ph.D., 1973, University of Wisconsin

CHARLOTTE WOLF (1983), Professor: B.A., 1949, M.A., 1959, University of Colorado; Ph.D., 1968, University of Minnesota

THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS

TAYLOR SIMS, Ph.D., Dean of The Fogelman College of Business and Economics

ERMAN F. PATTERSON, Ed.D., Associate Dean for Administration

PETER H. CISCEL, Ph.D., Associate Dean for Graduate Studies

ELLY FADDEL, Graduation Analyst

ROLYN J. HANNAN, M.Ed., Coordinator Graduate and Executive Training

INTHIA W. ALSUP, M.Ed., Assistant to the Dean for Undergraduate Programs

AYNE PODGORSKI, M.B.A., Coordinator, Intern Program

GEORGE S. MINNIER (1976), Professor: B.S.B.A., 1956, University of Arkansas; M.B.A., 1963, Southern Methodist University; Ph.D., 1974, University of Arkansas; C.P.A., 1978, Tennessee, C.M.A., 1978

LETTRICIA GAYLE RAYBURN (1966), Professor: B.S., 1961, Murray State University; M.S., 1962, University of Mississippi; Ph.D., 1966, Louisiana State University; C.P.A., 1962, Mississippi, 1963, Louisiana, 1968, Tennessee, C.M.A., 1975, C.I.A., 1980, C.C.A., 1982

J. DAVID SPICELAND (1981), Professor: B.S., 1971, University of Tennessee; M.B.A., 1972, Southern Illinois University; Ph.D., 1976, University of Arkansas; C.P.A., 1975, Arkansas, 1976, Louisiana

PAUL J. STEINBART (1987), Associate Professor: B.A., 1976, University of Illinois; M.B.A., 1980, Southern Illinois University-Carbondale; Ph.D., 1985, Michigan State University; C.P.A., 1980, Illinois; C.P.A., 1987, Tennessee

ROBERT B. SWEENEY (1983), Professor, Thompson-Hill Chair of Excellence in Accountancy: B.B.A., 1951, M.B.A., 1953, Ph.D., 1960, University of Texas; C.P.A., 1959, Texas

JAMES THOMAS THOMPSON (1955), Professor: B.A., 1948, Murray State University; M.B.A., 1949, Indiana University; C.P.A., 1960, Tennessee

ECONOMICS

DONALD R. WELLS, Ph.D., *Interim Chair*

DALE G. BAILS (1979), Associate Professor: B.S., 1970, University of South Dakota; M.A., 1971, University of Missouri; Ph.D., 1978, University of Nebraska

THOMAS G. CARPENTER (1980), Professor, President of the University: B.S., 1949, Memphis State University; M.A., 1950, Baylor University; Ph.D., 1963, University of Florida

CYRIL F. CHANG (1981), Professor: B.A., 1969, National Chench University; M.A., 1972, Memphis State University; Ph.D., 1979, University of Virginia

DAVID H. CISCEL (1973), Professor, Associate Dean, Fogelman College of Business and Economics: B.S., 1965, M.A., 1969, Ph.D., 1971, University of Houston

COLDWELL DANIEL, III (1970), Professor: B.A., 1949, Tulane University; M.B.A., 1950, Indiana University; Ph.D., 1958, University of Virginia

ROBERT D. DEAN (1969), Professor: B.B.A., 1955, Westminster College; M.A., 1960, Ph.D., 1966, University of Pittsburgh

THOMAS ORLANDO DEPPERSCHMIDT (1966), Professor: B.A., 1958, Fort Hays Kansas State College; Ph.D., 1965, University of Texas

S. DOUGLAS DYER (1987), Assistant Professor: B.A., 1978, Colorado College; M.A., 1985, Ph.D., 1987, University of Houston

RICHARD DENMAN EVANS (1978), Professor: A.B., 1970, M.A., 1971, Ph.D., 1974, University of Missouri

K. K. FUNG (1975), Professor: B.A., 1964, University of Hong Kong; Ph.D., 1970, Harvard University

JOHN E. GNUSCHKE (1976), Professor, Director, Center for Manpower Studies and Bureau of Business and Economic Research: B.S., 1969, Utah State University; M.A., 1971, Ph.D., 1975, University of Missouri

MICHAEL J. GOOTZEIT (1975), Associate Professor: B.S., 1961, City College of New York; M.A., 1963, Ph.D., 1966, Purdue University

KANJI HAITANI (1988), Professor, Shelby County Chair of Excellence in International Economics: B.A., 1961, Ohio Wesleyan University; Ph.D., 1965, Ohio State University

JULIA A. HEATH (1986), Assistant Professor: B.A., 1978, Bluffton College; Ph.D., 1986, University of South Carolina

WALTER H. KEMMIES (1987), Assistant Professor: B.A., 1982, M.A., 1983, Florida Atlantic University; Ph.D., 1987, Texas A&M University

ALBERT A. OKUNADE (1987), Assistant Professor: B.S., 1980, M.S., M.B.A., 1982, Wright State University; Ph.D., 1986, University of Arkansas

JOHN JOSEPH REID (1966), Associate Professor: B.S., 1955, University of Connecticut; Ph.D., 1962, University of Virginia

HOWARD P. TUCKMAN (1979), Distinguished Professor: B.S., 1963, Cornell University; M.S., 1967, Ph.D., 1970, University of Wisconsin

DONALD ROGER WELLS (1967), Professor, Interim Chair: A.B., 1954, University of California at Los Angeles; M.B.A., 1961, Ph.D., 1965, University of Southern California

SHELLEY I. WHITE—MEANS (1988), Assistant Professor: B.A., 1977, Grinnell University; Ph.D., 1983, Northwestern University

DONALD J. WYHOWSKI (1987), Assistant Professor: B.A., 1980, M.S., 1985, M.A., 1985, Michigan State University; Ph.D., 1988, Michigan State University

FINANCE, INSURANCE AND REAL ESTATE

MARS PERTL, Ph.D., *Chair*

DONALD A. BOYD (1957), Associate Professor of Finance: B.S., 1956, Delta State University; M.B.A., 1957, Indiana University; Ph.D., 1971, University of Mississippi

M. E. BOND (1979), Professor of Finance: B.B.A., 1961, M.A., 1965, Ph.D., 1967, University of Iowa

KENNETH J. BURNS (1976), Associate Professor of Finance: B.S., 1964, M.A., 1965, Memphis State University; Ph.D., 1975, University of Arkansas

CHEN—CHIN CHU (1984), Assistant Professor of Finance: B.S., 1977, National Chiao Tung University; M.A.S., 1979, Ph.D., 1984, University of Illinois

KEE H. CHUNG (1988), Assistant Professor of Finance: B.S., 1977, Han Yang University; M.S., 1979, The Korea Advanced Institute of Science, Ph.D., 1986, University of Cincinnati

GAYLON E. GREER (1986), Fogelman Professor of Real Estate: B.S., 1963, Arizona State University; M.S., 1968, University of Missouri; Ph.D., 1974, University of Colorado

PHILLIP THEODORE KOLBE (1989), Assistant Professor of Finance: B.S., 1970, United States Air Force Academy; M.A., 1981, Ph.D., 1988, University of Arizona

NANCY HISEY KRATZKE (1989), Assistant Professor of Business Law: B.A., 1966, M.A., 1973, University of Oklahoma; J.D., 1980, Memphis State University

DWIGHT B. MEANS, JR. (1989), Assistant Professor of Finance: B.S.E.E., 1965, Carnegie-Mellon University; M.B.A., 1969, Ph.D., 1984, University of Pittsburgh

LARRY MOORE (1987), Assistant Professor of Business Law: B.A., 1971, Vanderbilt University; M.A., 1974, Memphis State University; J.D., 1976, Washington University

MARS A. PERTL (1982), Associate Professor of Insurance, Chair: B.B.A., 1961, Ph.D., 1974, University of Iowa

WILLIAM SEATON PHILLIPS (1965), Assistant Professor of Insurance: B.S.B.A., 1948, Washington University; M.B.A., 1965, Memphis State University; C.P.C.U., 1968, C.L.U., 1978

C.S. PYUN (1970), Professor of Finance, Chair: B.A., 1960, Kyung Hee University; M.B.A., 1962, Miami University (Ohio); Ph.D., 1966, University of Georgia

LEONARD SCHWARTZ (1986), Associate Professor of Business Law: B.A., 1966, University of Chicago; M.A., 1970, John Hopkins University; J.D., 1979, Wayne State University

LESLIE S. SCRUGGS, JR. (1969), Associate Professor of Finance: B.B.A., 1963, Memphis State University; M.B.A., 1964, University of Chicago; Ph.D., 1974, Vanderbilt University

IRVIN LEE TANKERSLEY (1973), Associate Professor of Business Law: B.B.A., 1967, Memphis State University; J.D., 1972, Tulane University

POCHARA THEERATHORN (1989), Assistant Professor of Finance: B.Sc., 1969, Imperial College of Science and Technology; M.B.A., 1977, Thammasat University; Ph.D., 1983, Northwestern University

BETSY WARREN WILSON (1984), Assistant Professor of Business Law: B.S., 1973, University of North Carolina at Chapel Hill; J.D., 1977, Wake Forest University

MANAGEMENT

THOMAS R. MILLER, Ph.D., Chair

ARTHUR ELIOT BERKELEY (1988), Associate Professor: B.S., 1964, Cornell University; J.D., 1967, New York University; M.S. Adm., 1980, D.B.A., 1988, George Washington University

LILLIAN HUNT CHANEY (1965), Distinguished Professor, *PSI Chair in Office Management*: B.S., 1953, Alabama College; M.S., 1954, Ed.D., 1972, University of Tennessee

V. CAROL DANEHOWER (1989), Assistant Professor: D.B.A., 1987, University of Kentucky

PETER S. DAVIS (1989), Assistant Professor: Ph.D., 1988, University of South Carolina

JOHN BARRY GILMORE (1971), Associate Professor: B.B.A., 1963, Evangel College; M.B.A., 1965, University of Tulsa; Ph.D., 1971, University of Oklahoma

JAMES CLIFFORD HODGETTS (1965), Professor: B.S., 1948, University of Kentucky; M.A., 1949, University of Louisville; M.A.R., 1974, Memphis Theological Seminary; Ph.D., 1954, University of North Dakota

MATHEW WINFREE JEWETT (1968), Professor: B.S., 1956, M.S., 1961, University of Richmond; Ph.D., 1969, University of Alabama

COY A. JONES (1981), Associate Professor: B.B.A., 1971, University of Oklahoma; M.B.A., 1978, Central State University; Ph.D., 1982, University of Oklahoma

BANWARI L. KEDIA (1988), Professor, *Wang Chair of Excellence in International Business*: B.Com., 1960, University of Rajasthan; LL.B., 1964, University of Bombay; M.B.A., 1966, Atlanta University; Ph.D., 1976, Case Western Reserve University

THOMAS R. MILLER (1971), Professor, Chair: B.A., 1966, M.B.A., 1968, Ph.D., 1972, The Ohio State University

GLYNNA E. MORSE (1984), Assistant Professor: B.S., 1959, M.S., 1960, Central Missouri State University; Ed.D., 1981, University of Tennessee-Knoxville

VAN NORWOOD OLIPHANT (1969), Professor, Vice President for Planning and Public Service: B.B.A., 1963, University of Mississippi; M.B.A., 1964, Memphis State University; D.B.A., 1969, Mississippi State University

HERMAN F. PATTERSON (1955), Professor, Associate Dean for Administration, Fogelman College of Business and Economics: B.S., 1949, Berea College; M.A., 1954, University of Kentucky; Ed.D., 1967, Colorado State College

BINFORD H. PEEPLES (1957), Professor: B.S., 1949, Mississippi State University; M.S., 1952, Florida State University; M.S., 1961, University of Mississippi; Ed.D., 1964, University of Kentucky

WAYNE A. PODGORSKI (1988), Instructor, Internship Coordinator, Fogelman College of Business and Economics: B.B.A., 1980, M.B.A., 1986, Memphis State University

ROBERT W. RENN (1989), Assistant Professor: B.S., 1982, Kennesaw State College; M.S., 1984, Ph.D., 1989, Georgia State University

LEONARD D. ROSSER (1967), Professor, Director of Tennessee Small Business Development Center: B.B.A., 1950, University of Mississippi; M.B.A., 1965, Memphis State University; D.B.A., 1970, Mississippi State University

SHERRY A. SULLIVAN (1988), Assistant Professor: B.S., B.A., 1983, Bowling Green State University; Ph.D., 1988, Ohio State University

ROBERT R. TAYLOR (1983), Associate Professor: B.A., 1970, Rollins College; M.A., 1976, Ph.D., 1979, Louisiana State University

MALRA CLIFFT TREECE (1957), Professor: B.S., 1947, Arkansas State University; M.A., 1956, Memphis State University; Ph.D., 1971, University of Mississippi

HOWARD S. TU (1988), Assistant Professor: B.A., 1965, Northwest Nazarene College; M.B.A., 1984, Boise State University; Ph.D., 1988, University of Massachusetts at Amherst

GEORGE S. VOZIKIS (1987), Professor: B.A., 1973, University of Athens; M.B.A., 1975, Virginia Commonwealth University; Ph.D., 1979, University of Georgia

PETER WRIGHT (1988), Professor, *Chair of Excellence in Free Enterprise Management*: B.A., 1969, Ohio State University; M.B.A., 1973, Ph.D., 1975, Louisiana State University

MANAGEMENT INFORMATION SYSTEMS AND DECISION SCIENCES

LLOYD D. BROOKS, Ed.D., Chair

MOHAMMAD M. AMINI (1988), Assistant Professor: B.A., 1976, Tehran University; M.B.A., 1979, University of North Texas; M.S., 1984, Ph.D., 1989, Southern Methodist University

LLOYD DEMAR BROOKS (1971), Professor, Chair: B.S., 1964, Middle Tennessee State University; M.S., 1968, Ed.D., 1971, University of Tennessee

JUDITH COMPTON BROWN (1964), Assistant Professor: B.B.A., 1961, Memphis State University; M.S., 1962, University of Tennessee

CHARLES J. CAMPBELL (1978), Associate Professor: B.S., 1968, M.A., 1970, Southwest Texas State University; Ph.D., 1975, University of Texas

ESTHER A. HARBERT (1980), Assistant Professor: B.A., 1942, University of Pennsylvania; M.Ed., 1975, Ed.D., 1980 Memphis State University

WADE M. JACKSON (1985), Assistant Professor: B.Sc., 1974, Lambuth College; M.B.A., 1976, Memphis State University; Ph.D., 1983, Texas A & M University

SATISH MEHRA (1978), Professor: B.Sc., 1966, University of Delhi; B.Engg., 1969, University of Poona; M.B.A., 1972, Ph.D., 1978, University of Georgia

RUTH K. MEYER (1989), Assistant Professor: M.B.A., 1981, St. Cloud State University; Ph.D., 1989, University of Minnesota

RAVINDER NATH (1980), Associate Professor: B.A., 1972, M.A., 1974, Panjab University; M.S., 1975, Wichita State University; Ph.D., 1980, Texas Technological University

PRASHANT PALVIA (1986), Associate Professor: B.S., 1971, University of Delhi; M.S., 1972, M.B.A., 1974, Ph.D., 1984, University of Minnesota

WILLIAM PRACHT (1986), Associate Professor: B.A., 1961, University of Northern Colorado; M.A., 1978, Eastern New Mexico University; Ph.D., 1984, Texas Tech University

DONALD WAYNE SATTERFIELD (1968), Associate Professor: B.S.B.A., 1962, M.B.A., 1964, Ph.D., 1971, University of Arkansas

ROBERT E. SCHOOLEY (1988), Assistant Professor: B.S., 1981, M.S., 1982, Ed.D., 1985, Oklahoma State University

JUDITH CANFIELD SIMON (1975), Professor: B.S., 1961, Oklahoma State University; M.B.A., 1969, West Texas State University; Ed.D., 1976, Oklahoma State University

MICHAEL L. VINEYARD (1989), Assistant Professor: B.B.A., 1985, M.S., 1989, University of Cincinnati; ABD

RONALD B. WILKES (1989), Assistant Professor: B.S.E., 1970, University of Tennessee at Martin; M.B.A., 1981, Memphis State University; Ph.D., 1987, University of Minnesota

ROY H. WILLIAMS (1967), Professor: B.S., 1955, Delta State College; M.S., 1962, University of Mississippi; Ph.D., 1967, University of Alabama

STEVEN M. ZELTMANN (1989), Assistant Professor: B.S., 1976, University of Missouri; M.B.A., 1982, Florida State University; ABD

MARKETING

ROBERT L. BERL, Ph.D., Chair

C. L. ABERCROMBIE (1976), Associate Professor: B.S.B.A., 1955, M.B.A., 1956, University of Arkansas; Ph.D., 1966, University of Illinois

EMIN BABAKUS (1985), Assistant Professor: B.A., 1968, Turkish Naval Academy; B.Sc., 1978, Istanbul University; M.A., 1981, M.S., 1982, Ph.D., 1985, University of Alabama

DEANNA U. BARNWELL (1980), Assistant Professor: B.S., B.A., 1976, M.B.A., 1978, Western Carolina University; Ph.D., 1982, University of Arkansas

ROBERT L. BERL (1982), Professor, Chair: B.B.A., 1959, University of Cincinnati; M.B.A., 1969, Ph.D., 1983, Georgia State University

GREGORY W. BOLLER (1988), Assistant Professor: B.S., 1982, M.S., 1984, Ph.D., 1988, Pennsylvania State University

ALAN J. BUSH (1988), Associate Professor: B.A., 1976, Winona State University; M.B.A., 1978, Ph.D., 1983, Louisiana State University

ROBERT P. BUSH (1989), Assistant Professor: M.S., 1980, Ph.D., 1987, Louisiana State University

T. BETTINA CORNWELL (1987), Assistant Professor: B.A., 1981, Florida State University; M.B.A., 1983, Ph.D., 1987, University of Texas

WILLIAM A. CUNNINGHAM (1983), Associate Professor: B.S.B.A., 1976, M.S., 1979, Oklahoma State University; Ph.D., 1986, University of Arkansas

THOMAS N. INGRAM (1988), Professor: B.S., 1968, Auburn University; M.A., 1971, University of Alabama; Ph.D., 1980, Georgia State University

GEORGE H. LUCAS, JR. (1987), Associate Professor: B.S.B.A., 1976, M.B.A., 1979, University of Missouri; Ph.D., 1983, University of Missouri at Columbia

JOHN JOSEPH PEPIN (1965), Professor: B.B.A., 1962, M.B.A., 1964, Memphis State University; Ph.D., 1969, University of Mississippi

JAMES PETER RAKOWSKI (1978), Professor: A.B., 1967, Princeton University; Ph.D., 1971 Columbia University

PATRICK L. SCHUL (1986), Associate Professor: B.B.A., 1975, M.B.A., 1976, University of Texas, Permian Basin; Ph.D., 1980, Texas A & M University

J. TAYLOR SIMS (1985), Professor, Dean of The Fogelman College of Business and Economics: B.S., 1961, M.B.A., 1963, Texas Technological University; Ph.D., 1970, University of Illinois

ROBERT NEIL SOUTHERN (1976), Associate Professor: B.A., 1954, M.S., 1957, University of Tennessee; Ph.D., 1981, Arizona State University

HARRY HARMON SUMMER (1961), Professor: B.B.A., 1958, Memphis State University; M.S., 1961, Ph.D., 1965, University of Illinois

PETER KIET TAT (1980), Associate Professor: B.A., 1969, National Taiwan University; M.S., 1972, Memphis State University; D.B.A., 1979, Mississippi State University

THE COLLEGE OF COMMUNICATION AND FINE ARTS

RICHARD R. RANTA, Ph.D., Dean of the College of Communication and Fine Arts

RAYMOND M. LYNCH, D.M.A., Associate Dean

MARILYN Z. CARLTON, M.S., Assistant to the Dean for Undergraduate Programs and Academic Counselor

MARILYN S. ADAMS, M.A., Assistant to the Dean

ART

CAROL CROWN, Ph.D., Chair

FRED ALBERTSON (1987), Assistant Professor: B.A., 1974 University of California-Irvine; M.A., 1977, Ph.D., 1980, Bryn Mawr College

BONNIE BEAVER (1973), Associate Professor: B.A., 1962 Memphis State University; M.F.A., 1967, University of Georgia

EDWARD BEDNO (1986), Professor: B.F.A., 1950, Art Institute of Chicago; M.S., 1952, Illinois Institute of Technology

JANE H. BEDNO (1986), Associate Professor: B.A., 1965 Roosevelt University; J.D., 1978, College of William and Mary

EDWARD L. BLEIBERG (1986), Assistant Professor: B.A., 1973 Haverford College; M.A., 1977, Ph.D., 1984, University of Toronto

CAROL CROWN (1975), Associate Professor, Chair: B.A., 1967 University of Kansas; Ph.D., 1975, Washington University

LAWRENCE F. EDWARDS (1978), Professor: B.A., 1955 University of Southern Mississippi; M.F.A., 1957, University of Mississippi

CALVIN L. FOSTER (1976), Assistant Professor: B.F.A., 1971 Memphis State University; M.F.A., 1974, Auburn University

JAMES R. HARRINGTON (1978), Assistant Professor: B.F.A., 1960, M.F.A., 1962, Art Institute of Chicago; M.S., 1966 Southern Illinois University

KEN S. HUANG (1973), Associate Professor: B.A., 1962, Taiwan Normal University; M.A., 1972, M.F.A., 1973, University of Iowa

LAWRENCE E. JASUD (1981), Assistant Professor: B.S., 1966 Southern Illinois University; M.A., 1980, The Ohio State University

BEVERLY A. KISSINGER (1983), Assistant Professor: B.F.A., 1971, East Carolina University; M.F.A., 1977, University of Georgia

RICHARD H. KNOWLES (1966), Professor: B.A., 1955 Northwestern University; M.A., 1961, Indiana University

ROGER S. LANGDON (1965), Associate Professor: B.S., 1963, East Tennessee State University; M.F.A., 1965, Florida State University

SANDRA L. LOWRANCE (1985), Assistant Professor: B.F.A., 1971, University of Tennessee; M.P.D., 1985, North Carolina State University

PAUL E. MCKEEGAN (1975), Associate Professor: B.S., 1964, Indiana University of Penn.; M.A., 1969, Kent State University; Ed.D., 1975, Ball State University

LARRY E. MCPHERSON (1978), Associate Professor: B.A., 1976, Columbia College Chicago; M.A., 1978, Northern Illinois University

GREELY L. MYATT (1989), Assistant Professor: B.F.A., 1975, Delta State University; M.F.A., 1980, University of Mississippi

MELINDA B. PARSONS (1984), Associate Professor: B.A., 1969, M.F.A., 1975, Ph.D., 1984, University of Delaware

CAROL J. PURTLE (1977), Associate Professor: B.A., 1960, Maryville College; M.A., 1966, Manhattansville College; Ph.D., 1976, Washington University

JAMES R. RAMSEY (1979), Associate Professor: B.A., 1968, Vanderbilt University; M.A., 1970, Ph.D., 1975, Tulane University

WAYNE SIMPKINS (1974), Associate Professor: B.F.A., 1970, Carnegie-Mellon University; M.F.A., 1974, University of California-Santa Barbara

BRACK WALKER (1968), Professor: B.A., 1953, Florence State University; M.F.A., 1961, University of Southern California

NILES WALLACE (1976), Associate Professor: B.S., 1970, Edinboro State College; M.F.A., 1974, Alfred University

JAMES F. WATKINS (1968), Professor: B.A., 1960, Louisiana College; M.A., 1965, University of Alabama

NANCY SHARPE WHITE (1974), Associate Professor: B.A., 1970, Florida Atlantic University; M.F.A., 1974, Alfred University

PROFESSIONAL STAFF

DEANNA W. ELGART (1985), *Slide Curator*: B.A., 1982, University of Tennessee; M.A., 1985, University of Virginia

ANNA KAY WALKER (1986), *Curator of Education*: Institute of Egyptian Art and Archaeology: B.A., 1962, Southern Methodist University; M.A., 1983, Memphis State University

JOURNALISM

DAN L. LATTIMORE, Ph.D., *Chair*

E. W. (BILL) BRODY (1982), Professor: B.A., 1977, Eastern Illinois University; M.A., 1978, California State University; Ed.D., 1982, Memphis State University

J. RICK FISCHER (1989), Assistant Professor: M.A., 1977, San Jose State University

JOHN DE MOTT (1980), Professor: B.S., 1946, University of Kansas; M.A., 1960, University of Missouri; Ph.D., 1971, Northwestern University

ELINOR GRUSIN (1988), Assistant Professor: B.S., 1962, Memphis State University; M.A., 1982, University of Mississippi; Ph.D., 1987, Ohio University

DAN L. LATTIMORE (1987), Professor, *Chair*: B.A., 1966, M.A., 1968, Texas Christian University; M.R.E., 1968, Southwestern Baptist Seminary; Ph.D., 1972, University of Wisconsin

JOHN LEE (1984), Professor: B.A., 1952, Texas Tech University; M.S.J., 1965, West Virginia University

RONALD EDWARD SPIELBERGER (1968), Associate Professor: B.S., 1963, Memphis State University; M.A., 1965, Ohio State University

GERALD C. STONE (1979), Professor: B.A., 1966, M.A.J., 1969, Louisiana State University; Ph.D., 1975, Syracuse University

ARTHUR A. TERRY (1980), Associate Professor: B.J., 1960, M.A., 1980, University of Missouri

SANDRA H. UTT (1984), Associate Professor: B.S.J., 1968, M.S.J., 1974, West Virginia University; Ph.D., 1983, Ohio University

EDWARD M. WELCH, JR., (1987), Assistant Professor: B.A., 1972, University of Michigan; M.A., 1977, Northwestern University

MUSIC

RUSSELL ORIS PUGH, Ed.D., *Interim Chair*

JOHN BAUR (1979), Professor: B.M., 1969, M.M., 1970, D.M.A., 1977, Cincinnati College Conservatory

LEMUEL BERRY, JR., (1988), Professor: B.A., 1969, Livingstone College; M.A., 1970, Ph.D., 1973, University of Iowa

ANGELINE CASE-NEWPORT (1978), Assistant Professor: B.M., 1971, George Peabody College for Teachers; M.M., 1978, Memphis State University

JOHN CHIEGO (1979), Assistant Professor: B.A., 1975, Montclair State College; M.M., 1979, Northwestern University

MARTY COURTNEY (1987), Assistant Band Director: B.A., 1983, Louisiana Tech University; M.M., 1985, D.M.A., 1987, Memphis State University

RICHARD MICHAEL DOLPH (1969), Associate Professor: B.M., 1965, Curtis Institute of Music; M.A., 1969, University of Pennsylvania

WALTER WILSON WADE (1962), Professor: B.S., 1948, East Tennessee State University; M. Music, 1950, Ph.D., 1958, Northwestern University

DAVID RUSSELL WILLIAMS (1980), Professor: A.B., 1954, Columbia College, N.Y.; M.A., 1956, Columbia University; Ph.D., 1965, Eastman School of Music, University of Rochester

THEATRE AND COMMUNICATION ARTS

JOHN P. BAKKE, Ph.D., *Chair*

DAVID LEE ACEY (1972), Assistant Professor: B.S., 1970, M.A., 1972, Memphis State University

THE COLLEGE OF EDUCATION

NATHAN ESSEX, Ph.D., *Dean*

HARRY L. BOWMAN, Ed.D., *Associate Dean*

JOHN W. SCHIFANI, Ed.D., *Assistant Dean*

GEORGE W. ETHERIDGE, Ed.D., *Director of Graduate Studies*

GLENN FULLER, Ed.D., *General Academic Advisor*

TERRY L. JAMES, Ed.D., *Director of Student Services*

ANNE C. TROUTMAN, Ph.D., *Director of Teacher Education*

COUNSELING AND PERSONNEL SERVICES

ROBERT L. CRAWFORD, Ed.D., *Interim Chair*

ROBERT L. CRAWFORD (1975), Associate Professor, *Interim Chair* B.A., 1968, M.Ed., 1969, Ed.D., 1973, University of Kentucky, J.D., 1982, Memphis State University

ROBERT ELMER DAVIS (1964), Professor B.A.E., 1954, M.Ed., 1958, Ed.D., 1962, University of Mississippi

CHARLENE DeLOACH (1974), Associate Professor B.S., 1965, M.Ed., 1966, Ph.D., 1971, University of Illinois

FRED J. DORN (1986), Associate Professor B.A., 1973, M.A., 1975, New Mexico State University, Ph.D., 1980, Iowa State University

BURL ELDRED GILLILAND (1973), Professor B.S., B.A., 1949, Jacksonville State University, M.Ed., 1960, University of Tennessee at Chattanooga; Ed.D., 1966, University of Tennessee at Knoxville

BOBBY GENE GREER (1967), Professor B.S., 1960, North Texas University, M.Ed., 1961, University of Arkansas, Ph.D., 1965, University of Texas

RICHARD KEITH JAMES (1977), Associate Professor B.S.E., 1964, M.Ed., 1966, Eastern Illinois University, Ph.D., 1974, Indiana State University

WILLIAM M. JENKINS (1971), Professor B.S., 1959, Florida State University, M.A., 1965, Ed.D., 1972, University of Alabama

PATRICIA H. MURRELL (1970), Professor B.A., 1956, Millsaps College, M.Ed., 1966, Ed.D., 1968, University of Mississippi

M. CAROLE PISTOLE (1989), Assistant Professor B.A., 1980, M.A., 1982, Nicholls State University, Ph.D., 1987, University of Georgia

ROB ROBERTS (1986), Assistant Professor B.S., 1973, M.Ed., 1978, West Texas State University, Ph.D., 1986, North Texas State University

SALLY D. STABB (1988), Assistant Professor B.A., 1982, M.Ed., 1984, Pennsylvania State University; Ph.D., 1988, University of Kansas

RUSSELL E. THOMAS (1980), Associate Professor B.S., 1963, M.S., 1965, Ph.D., 1970, Purdue University

JOYCE LYNOM YOUNG (1978), Associate Professor B.A., 1963, LeMoyne College, M.Ed., 1967, Memphis State University, Ph.D., 1976, Southern Ill. University (Carbondale)



CURRICULUM AND INSTRUCTION

THOMAS A. RAKES, Ed.D., *Interim Chair*

KATHERINE A. ABRAHAM (1986), Assistant Professor B.A., 1967, M.S., 1969, Ph.D., 1979, University of Mississippi

OTTO BENAVIDES (1985), Assistant Professor B.A., 1965, J.D., 1974, University LeGran, Columbia, South America, M.Ed., 1975, Ed.S., 1976, Northeast Louisiana University

CAROLE BOND (1979), Associate Professor B.A., 1966, University of Iowa, M.A., 1976, Ph.D., 1979, Arizona State University

LUCINDIA H. CHANCE (1987), Associate Professor, Director of Extended Programs B.S., 1968, Lambuth College, M.S., 1976, University of Tennessee - Martin; Ed.D., 1985, Memphis State University

RONALD W. CLEMISON (1970), Professor B.E., 1962, University of Wisconsin, M.A.T., 1966, Michigan State University, Ph.D., 1970, University of Iowa

JOSEPH FARRIS CRABTREE, II (1965), Professor B.S., 1950, Emory and Henry College, M.Ed., 1958, Ed.D., 1965, University of Virginia

AMY P. DIETRICH (1986), Assistant Professor B.S., 1971, University of Alabama; M.Ed., 1974, Ed.D., 1979, Memphis State University

GEORGE ETHERIDGE (1977), Associate Professor B.A.Ed., 1964, M.Ed., 1969, Ed.D., 1971, University of Florida

ARTHUR ERVIN GARNER (1970), Professor B.A., 1960, Harding College, M.Ed., 1966, Ed.D., 1969, University of Houston

DUANE M. GIANNANGELO (1972), Associate Professor B.S., 1964, Edinboro State College, M.Ed., 1967, University of Pittsburgh, Ph.D., 1972, University of Iowa

TERRY L. JAMES (1977), Associate Professor B.S., 1965, M.Ed., 1968, Ed.D., 1973, University of Missouri

JOHN M. JOHNSTON (1984), Associate Professor B.S., 1969, University of Texas, M.S., 1974, University of Tennessee; Certificate of Advanced Study, 1975, University of Chicago, Ph.D., 1978, Ohio State University

ROBERT A. KAISER (1969), Associate Professor B.S., 1957, Allegheny College, M.Ed., 1961, Ed.D., 1967, University of Pittsburgh

JANIE KNIGHT (1983), Assistant Professor B.A., 1957, Lane College, M.Ed., 1971, Memphis State University, Ph.D., 1983, University of Iowa

DOTSY ADAMS LILES (1986), Instructor B.S., 1968, M.S., 1972, Memphis State University

RAMONA M. MAHOOD (1964), Assistant Professor B.S., 1955, Utah State University, M.S., 1959, C.A.S., 1971, University of Illinois

MARGUERITE G. MALONE (1984), Assistant Professor B.A., 1960, College of William and Mary, M.S., 1981, Ed.D., 1984, Memphis State University

GARY R. MORRISON (1984), Associate Professor B.S., 1971, Ed.D., 1977, Indiana University

JAMES K. MUSKELLEY (1964), Associate Professor B.A., 1949, M.S., 1950, University of Mississippi, Ed.D., 1972, Memphis State University

THOMAS ARTHUR RAKES (1972), Professor, *Interim Chair* B.S., 1968, Milligan College; M.A., 1969, East Tennessee State University, Ed.D., 1972, University of Tennessee

JUNE ROSE RICHIE (1968), Associate Professor B.A., 1952, Baylor University, M.Ed., 1957, Ed.D., 1972, University of Mississippi

DENNIE L. SMITH (1971), Professor B.S., 1965, M.A., 1966, Marshall University, Ed.D., 1969, Auburn University

LANA M. SMITH (1975), Professor B.A., 1964, University of Texas, M.S., 1970, Ph.D., 1975, Southern Illinois University

EDUCATIONAL ADMINISTRATION AND SUPERVISION

SAM LUCAS, Ed.D., *Interim Chair*

NATHAN L. ESSEX (1989), Professor, Dean Ph.D., 1975, University of Alabama

SAM LUCAS (1985), *Interim Chair*, Associate Professor B.S., 1952, Alcorn State University, M.S., 1967, Ed.D., 1970, University of Tennessee

FRANK W. MARKUS (1971), Professor B.S., 1956, M.A., 1957, Ph.D., 1964, Northwestern University

ROBERT PIGGS (1988), *Regents Professor* B.A., 1964, Vanderbilt University, M.Ed., 1968, Ed.D., 1970, Memphis State University

R. EUGENE SMITH (1980), *Adjunct Professor, Vice President for Business and Finance* B.S., 1957, Middle Tennessee State University, M.S., 1966, Memphis State University, Ph.D., 1979, University of Mississippi

THOMAS C. VALESKY (1984), Associate Professor *Interim Chair* B.A., 1971, Clemson University, M.A., 1973, University of Alabama, Ed.D., 1984, Memphis State University

FOUNDATIONS OF EDUCATION

CARLTON H. BOWYER, Ph.D., *Chair*

J. JACKSON BARNETTE (1985), Associate Professor B.S., 1966, M.A., 1968, Ph.D., 1972, The Ohio State University

JERRY N. BOONE (1962), Professor B.A., University of Mississippi, M.A., 1951, University of Florida, Ph.D., 1961, Vanderbilt University

HARRY L. BOWMAN (1970), Professor, Associate Director, Bureau of Educational Research and Services B.Th., 1959, Pentecostal Bible Institute, B.A., 1962, Union University, M.A., 1964, Ed.D., 1966, George Peabody College

CARLTON H. BOWYER (1972), Professor, Chair A.B., 1949, M.A., 1952, Ph.D., 1958, University of Missouri

E. DEAN BUTLER (1970), Associate Professor B.M., 1957, Belmont College, M.A., 1962, Memphis State University, Ed.D., 1966, University of Tennessee

TODD M. DAVIS (1984), Associate Professor B.S., 1972, M.A., 1976, George Washington University, Ph.D., 1982, University of Alabama

GEORGE L. DOWD (1963), Associate Professor B.S., 1947, Union University; M.A., 1949, M.Ed., 1952, Ed.D., 1956, University of Mississippi

DIANNE D. HORGAN (1984), Assistant Professor B.A., 1969, Stanford University, Ph.D., 1975, University of Michigan

ELBERT NOTHERN (1958), Professor B.S.E., 1947, University of Arkansas, Ed.M., 1949, Harvard University, Ed.D., 1953, University of Arkansas

JOHN R. PETRY (1967), Associate Professor B.A., 1948, M.S., 1953, Hardin-Simmons University; B.D., 1953, M.Div., 1973, Southwestern Baptist Theological Seminary, Ed.D., 1973, George Peabody College

ERNEST A. RAKOW (1975), Professor: B.S., 1964, Concordia Teachers College; M.A., 1967, Ph.D., 1974, University of Chicago

STEVEN M. ROSS (1974), Professor: B.A., 1969, M.S., 1972, Ph.D., 1974, Pennsylvania State University

JOHN H. SCAHILL (1989), Assistant Professor: B.A., 1971, M.A., 1972, Ed.D., 1981, University of Kentucky

JEAN A. STEITZ (1979), Associate Professor: B.S., 1967, University of Wisconsin-Madison; M.S., 1974, University of Wisconsin-Milwaukee; Ph.D., 1978, University of Wisconsin-Madison

ROBERT F. TODD (1968), Associate Professor: B.A., 1950, M.A., 1955, Murray State University; Ph.D., 1959, University of Mississippi

KAREN D. WEDDLE (1989), Assistant Professor: B.S., 1976, M.S., 1977, Ph.D., 1982, University of Tennessee, Knoxville

HENRY S. ZURHELLEN (1970), Associate Professor: B.A., 1949, M.A., 1960, Columbia University; Ed.D., 1970, University of Tennessee

HEALTH, PHYSICAL EDUCATION AND RECREATION

MELVIN A. HUMPHREYS, Re.D., Chair

SALLY ANDREWS (1987), Women's Golf Coach: B.S., 1982, Christian Brothers College

DAVID J. ANSPAUGH (1971), Professor, Director, Center for Fitness and Wellness: B.A., 1965, Albion College; M.A., 1967, Eastern Michigan University; P.E.D., 1971, Indiana University, Ed.D., 1977, University of Tennessee

LINDA ARNOLD (1976), Women's Athletic Trainer: B.S., 1975, Murray State; M.S., 1976, Kansas State University

CHRISTIAN BARTELS (1988), Soccer Coach: B.S., 1973, M.Ed., 1977, Bowling Green State University

THOMAS BRIGHT BUFORD, JR. (1966), Men's Tennis Coach: B.A., 1957, Southwestern at Memphis

EDWIN D. CANTLER, JR. (1979), Athletic Trainer: B.S., 1974, M.Ed., 1977, Memphis State University

BRENDA CASH (1985), Women's Track and Field Coach: B.A., 1981, Arizona State University; M.A., 1985, University of Iowa

DIANE COLEMAN (1982), Instructor, Campus School Physical Education Specialist: B.S., 1979, M.Ed., 1981, Memphis State University

JAMES A. COOK (1971), Men's Golf Coach: B.S., 1968, Memphis State University

DARRELL CRASE (1966), Professor: B.A., 1956, Berea College; M.S., 1958, University of Tennessee; Ph.D., 1966, Ohio State University

LARRY EDWARDS (1973), Associate Professor; Head Division of Physical Education and Sport: B.S., 1966, Erskine College; M.Ed., 1972, Memphis State University; Ed.D., 1978, University of Mississippi

EDWARD KING ELLSWORTH (1969), Assistant Professor: B.A., 1965, Michigan State University; M.S., 1967, University of Tennessee; Ed.S., 1974, University of Mississippi

RICHARD DENNIS FADGEN (1968), Swimming Coach: B.S., 1959, North Carolina State University; M.S., 1961, Appalachian State University

CAROLYN THORPE FURR (1964), Assistant Professor: B.S., 1961, Longwood College; M.S., 1962, University of Tennessee

CHERYL GANONG (1984), Pom Pon Coach: B.S., 1978, Memphis State University

WAYNE GUTCH (1980), Instructor, Head Division of Intramurals and Recreation Services: B.S., 1972, University of Tennessee; M.Ed., 1974, M.S., 1976, Memphis State University

MICHAEL H. HAMRICK (1967), Professor; Head, Division of Health Science and Safety Education: B.S., 1966, M.Ed., 1967, Memphis State University; Ed.D., 1973, University of Tennessee

WINAKA HANADA (1989), Women's Assistant Volleyball Coach: B.A., 1986, Japan Women's College of Physical Education

LENN T. HAYS (1970), Men's Track Coach: B.A., 1967, Southwestern University; M.Ed., 1972, Memphis State University

JANE HOWLES HOOKER (1969), Associate Professor: B.S.E., 1968, M.E., 1969, Memphis State University; Ed.S., 1974, University of Mississippi

JEFFREY T. HOPKINS (1989), Assistant Baseball Coach: B.S., 1975, M.Ed., 1980, Memphis State University

MICHAEL G. HUFFMAN (1985), Assistant Professor; Head Division of Recreation, Parks, and Leisure Studies: B.S., 1978, M.S., 1980, Memphis State University; Ph.D., 1985, University of Utah

MELVIN A. HUMPHREYS (1962), Professor, Chair: B.S., 1959, B.S., 1961, University of Tennessee; M.A., 1962, Memphis State University; Re.D., 1973, Indiana University

CLIFF JOHNSON (1986), Instructor: B.S., 1976, University of Tennessee at Martin; M.Ed., 1984, Memphis State University

OBERT KILPATRICK (1971), Men's Baseball Coach: B.S., 1962, University of Mississippi

ICTOR KOENING (1989), Assistant Strength Coach: B.S., 1983, M.Ed., 1988, Memphis State University

ARRIETTE JOAN LAVENUE (1967), Assistant Professor, Associate Director Park Ranger Training: B.S., 1960, University of Tennessee at Martin; M.S., 1961, University of Tennessee

BETTY LEWIS (1968), Administrative Assistant, Intramurals and Recreational Services: B.S., 1965, M.Ed., 1968, M.S., 1975, Memphis State University

LAWRENCE E. LILES (1975), Instructor, Racquetball Coach: B.S., 1974, M.S., 1975, Memphis State University

MICHAEL N. LINGENFELTER (1989), Women's Volleyball Coach: B.S.Ed., 1984, University of Cincinnati

LAWRENCE A. LOVINGTON (1985), Instructor: B.A., 1955, Eastern Kentucky University; M.S., 1963, Memphis State University

BARBARA McCLANAHAN (1986), Instructor: B.S., 1981, M.S., 1983, Memphis State University

CHARLES J. MAZZONE (1977), Instructor, Handball Coach: B.S., 1971, M.Ed., 1972, Memphis State University

P. RENEE MELTON (1989), Instructor: M.S., 1988, Memphis State University

PATTI S. MURPHREE (1989), Instructor: M.S., 1987, Memphis State University

SUSAN E. MURRAY (1989), Instructor: M.S., 1978, Memphis State University

JEBOSE OKWUMABUA (1988), Associate Professor: B.S., 1976, M.S., 1980, Memphis State University; Ph.D., 1985, University of New Mexico

CHARLOTTE PETERSON (1975), Women's Tennis Coach: B.S., 1972, M.Ed., 1974, Memphis State University

FRANK ROSATO (1973), Professor; Associate Director, Center for Fitness and Wellness: B.S., 1965, Troy State University; M.Ed., 1966, Ed.D., 1973, University of Tennessee

CHARLES ROY SCHROEDER (1968), Professor: B.Ed., 1960, University of Miami; M.S., 1964, Ph.D., 1968, Florida State University

GEDDES SELF, JR. (1968), Assistant Professor: B.A., 1960, M.A., 1961, Memphis State University

FRANK UNRUH SIMONTON (1968), Assistant Professor: B.S., 1961, M.A., 1962, Memphis State University

MICHAEL THIEKE (1979), Assistant Men's Baseball Coach: B.S., 1974, M.S., 1977, Memphis State University

ELIJAH VANCE TURMAN (1965), Assistant Professor: B.S., 1960, University of Tennessee at Martin; M.A., 1962, Morehead State University

SHARON L. VAN OTEGHEN (1977), Associate Professor: B.A., 1961, M.A., 1968, University of Iowa; P.E.D., 1973, Indiana University

JAMES A. VEST (1979), Instructor, Director of Intramurals: B.S.Ed., 1976, M.Ed., 1978, Memphis State University

HOLLIE WALKER (1978), Associate Professor: B.S., 1965, Claffin University; M.S., 1965, State University; Ph.D., 1978, University of Utah

STANLEY N. WALLS (1977), Instructor, Director of Recreation Services: B.S., 1973, M.Ed., 1976, Memphis State University

LAWRENCE W. WEISS (1986), Associate Professor: B.S., 1974, Old Dominion University; M.Ed., 1974, Ed.D., 1979, University of Georgia

HOME ECONOMICS

DIXIE RUTH CRASE, Ph.D., Chair

PATTI R. BRADFORD (1978), Assistant Professor: B.F.A., 1972, Mississippi University for Women; M.F.A., 1977, Memphis State University

DIXIE RUTH CRASE (1966), Professor, Chair: B.S., 1959, Eastern New Mexico University; M.S., 1960, Kansas State University; Ph.D., 1967, Ohio State University

MARY WALLACE CROCKER (1974), Professor: B.S.E., 1961, Delta State College; M.A., 1963, University of Mississippi; Ph.D., 1968, Florida State University

LUCILLE GOLIGHTLY (1973), Associate Professor: B.S., 1946, Auburn University; M.S., 1955, University of Tennessee; Ph.D., 1973, Utah State University

JULIA THOMPSON HALL (1965), Assistant Professor: B.S., 1955, M.A., 1957, University of Southern Mississippi

CAROL O. MITCHELL (1987), Associate Professor: B.S.E., 1966, Henderson State University; M.S., 1972, Ph.D., 1977, Texas Woman's University

MARGARET M. QUINN (1983), Instructor: B.S., 1970, University of Tennessee-Knoxville; M.E., 1976, Memphis State University

ROBIN R. ROACH (1981), Assistant Professor: B.S., 1976, Memphis State University; M.P.H., 1980, Tulane University; Ed.D., 1989, Vanderbilt University

MARY ANN SMITH (1987), Professor: B.S.E., 1960, Henderson State University; M.S., 1962, Ph.D., 1965, University of Tennessee, Knoxville

PATRICIA MURPHY STEVENS (1980), Assistant Professor: B.S., 1968, University of Tennessee at Martin; M.S., 1972, Indiana State University; Ed.D., 1988, Mississippi State University

CAROLYN LITCHFIELD WORMS (1982), Associate Professor: B.S., 1968, Old Dominion University; M.S., 1972, Virginia Commonwealth; Ed.D., 1976, Virginia Polytechnic Institution and State University

SPECIAL EDUCATION

WILSON D. DIETRICH, Ed.D., Chair

ROBERT M. ANDERSON (1973), Professor: B.S., 1958, Slippery Rock State College; M.A., 1960, Bradley University; Ed.D., 1965, University of Pittsburgh

WILSON L. DIETRICH (1971), Professor, Chair: B.S., 1958, Slippery Rock State College; M.A., 1964, Appalachian State University; Ed.D., 1967, University of Alabama

BONNIE ROBERTS GREER (1974), Associate Professor: A.B., 1968, Indiana University; M.Ed., 1969, Ph.D., 1971, Oklahoma University

JOHN G. GREER (1974), Professor: B.A., 1967, M.Ed., 1971, University of Delaware; Ph.D., 1974, Pennsylvania State University

GAYE G. HANSEN (1988), Instructor: B.S., 1973, Western Michigan University; M.S., 1987, Memphis State University

JAYE HARVEY-YODER (1983), Assistant Professor: B.S., 1979, Virginia Polytechnic Institute and State University; M.Ed., 1980, James Madison University; Ed.D., 1989, Memphis State University

ALTON DAVID QUICK (1970), Professor: A.B., 1960, M.Ed., 1962, Birmingham Southern College; Ed.D., 1966, University of Alabama

HOBERT LYNDALL RICH (1969), Professor: B.A., 1958, M.A., 1961, University of Kentucky; Ph.D., 1969, Syracuse University

JOHN W. SCHIFANI (1975), Professor: B.A., 1958, Nichols State University; M.S.W., 1960, Louisiana State University; Ed.D., 1971, University of Alabama

ANNE C. TROUTMAN, Associate Professor: B.S.Ed., 1964, University of Georgia; M.Ed., 1970, Ph.D., 1977, Georgia State University

THE HERFF COLLEGE OF ENGINEERING

GERALD S. JAKUBOWSKI, Ph.D., Interim Dean

CHARLES R. COZZENS, Ed.D., Interim Associate Dean and Director of Graduate Studies and Research

MARY E. MANSOUR, B.B.A., Administrative Assistant to the Dean

CAROL LEE FERGUSON, M.Ed., College Level Advisor

BIOMEDICAL ENGINEERING

JOHN D. RAY, Ph.D., Interim Chair

NED H. HWANG (1989), Professor, Chair of Excellence in Biomedical Engineering: Ph.D., 1966, Colorado State University

JOHN D. RAY (1968), Professor, Interim Chair: B.S., 1956, M.S., 1957, University of Illinois; Ph.D., 1968, University of Oklahoma

CIVIL ENGINEERING

OTTO J. HELWIG, Ph.D., Chair

JERRY LEE ANDERSON (1972), Associate Professor: B.S.C.E., 1966, Tennessee Technological University; M.S., 1967, Ph.D., 1972, Vanderbilt University

CHARLES V. CAMP (1989), Assistant Professor: B.S.C.E., 1981, M.S., 1986, Auburn University; Ph.D., 1987, Oklahoma State University

TZYY-SHIOU CHANG (1988), Assistant Professor: B.S., 1977, Tamkang University; M.S., 1982, Ph.D., 1986, University of Michigan

THOMAS SAMUEL FRY (1969), Professor: B.S.C.E., 1950, M.S.C.E., 1953, Ph.D., 1959, University of Illinois

OTTO J. HELWIG (1988), Professor, Chair: B.S., 1958, U.S. Naval Academy; M.Div., 1966, Fuller Theological Seminary; M.S., 1967, U.C.L.A.; Ph.D., 1975, Colorado State University

JAMIE W. HURLEY, JR. (1981), Associate Professor: B.S., 1961, M.S., 1967, Mississippi State University; Ph.D., 1975, University of Florida

HOWARD H. HWANG (1986), Associate Professor: B.S.E., 1968, Cheng Kung University; M.S., 1972, D.Eng.Sc., 1976, Columbia University

MARTIN E. LIPINSKI (1975), Professor: B.S.C.E., 1964, University of Illinois; Certificate in Traffic Engr., 1965, Yale; M.S.C.E., 1966, Ph.D., 1972, University of Illinois

LARRY W. MOORE (1983), Assistant Professor: B.S.C.E., 1973, University of South Alabama; M.S.C.E., 1974, Ph.D., 1983, Mississippi State University

SHAHRAM PEZESHK (1989), Assistant Professor: B.S.C.E., 1982, University of Illinois; M.S.C.E., 1983, University of California at Berkeley; Ph.D., 1989, University of Illinois

MICHAEL J. RACER (1989), Assistant Professor: B.A., 1984, Rice University; M.S., 1986, Ph.D., 1990, University of California at Berkeley

EDMUND P. SEGNER JR. (1976), Professor, Associate Vice President for Research: B.S.C.E., 1949, M.S.C.E., 1952, University of Texas; Ph.D., 1962, Texas A & M University

WILLIAM T. SEGUI (1968), Associate Professor: B.S.C.E., 1960, M.S., 1966, Ph.D., 1971, University of South Carolina

JOHN WARREN SMITH (1970), Professor: B.S.C.E., 1965, M.S.C.E., 1967, Ph.D., 1968, University of Missouri (Rolla)

ROGER H. SMITH (1986), Associate Professor: B.S.C.E., 1965, M.S.C.E., 1966, Ph.D., 1978, University of Missouri (Rolla)

ORVILLE E. WHEELER (1978), Professor: B.E., 1954, Vanderbilt University; M.S.C.E., 1956, University of Missouri; Ph.D., 1966, Texas A & M University

RENE WOLF (1985), Assistant Professor: B.S., 1950, U.S. Military Academy; M.S.C.E., University of Illinois; J.D., 1984, Memphis State University

ELECTRICAL ENGINEERING

CHARLES W. BRAY, Ph.D., *Interim Chair*

ABDUL AZIZ BHATTI (1987), Assistant Professor: F.T.C.G., 1967, City & Guilds of London Institute, England; M.S.E.E., 1974, Illinois Institute of Technology; M.S.C.I.C.E., 1981, Ph.D., 1984, University of Michigan

CHARLES WILSON BRAY (1969), Professor, *Interim Chair*: B.S., 1960, M.S., 1961, Mississippi State University; Ph.D., 1969, University of Tennessee

MALCOLM DONALD CALHOUN (1984), Professor: B.S.E.E., 1965, Purdue University; M.S., 1968, Memphis State University; Ph.D., 1976, Mississippi State University

FRANK J. CLAYDON, III (1987), Assistant Professor: B.S.E.E., 1982, Texas A & M University; M.S., 1984, Ph.D., 1987, Duke University

MICHAEL L. DALEY (1988), Associate Professor: B.S.E.E., 1968, University of Massachusetts; M.S.E.E., 1970, Ph.D., 1973, University of Rochester

BABAJIDE O. FAMILIONI (1987), Assistant Professor: B.S.E.E., 1978, University of Lagos, Nigeria; Ph.D., 1986, University of Alberta, Canada

STEVEN T. GRIFFIN (1982), Associate Professor: B.S.E.E., 1975, Memphis State University; M.S., 1977, Ph.D., 1979, University of Illinois

CARL EDWIN HALFORD (1970), Professor: B.S.E.E., 1966, M.S.E.E., 1967, Ph.D., 1970, University of Arkansas

WILLIAM HOWARD JERMANN (1967), Professor: B.E.E., 1958, M.A., 1962, University of Detroit; Ph.D., 1967, University of Connecticut

THOMAS DEWEY SHOCKLEY, JR. (1967), Professor: B.S.E.E., 1950, M.S.E.E., 1952, Louisiana State University; Ph.D., 1963, Georgia Institute of Technology

DEAN LANCE SMITH (1988), Associate Professor: B.S.E.E., 1965, M.S.E., 1965, Ph.D., 1972, University of Michigan

ENGINEERING TECHNOLOGY

KENNETH D. CREMER, Ed.D. *Chair*

WESTON TERRELL BROOKS (1967), Professor: B.S., 1961, M.Ed., 1962, Sam Houston State College; D.Ed., 1964, Texas A & M University

SHERRY BRYAN—HAGGE (1984), Assistant Professor: B.S., 1980; M.S., 1982, Memphis State University

CHARLES RICHARD COZZENS (1968), Associate Professor, *Director of Graduate Studies*: B.S., 1953, Texas A&M University; M.Ed., 1960, Southwest Texas State College; D.Ed., 1965, Texas A&M University

KENNETH DALE CREMER (1969), Professor, *Chair*: B.S., 1956, M.A., 1960, Murray State University; Ed.D., 1970, Utah State University

GLEN WILSON DAVIS (1968), Assistant Professor: B.S., 1966, Memphis State University; M.S., 1974, Murray State University

RONALD LEE DAY (1973), Associate Professor: B.S., 1967, M.A., 1970, Western Kentucky University

ROBERT LIVINGSTON DOUGLAS (1980), Assistant Professor: B.S.E.E., 1962, University of Mississippi; M.S.E.E., 1967, University of Houston

LEON EUGENE DROUIN (1981), Assistant Professor: B.S., 1963, Purdue University; M.S.E.E., 1970, United States Naval Post Graduate School

SCOTT W. EDWARDS (1986), Instructor: B.S., 1982, Oral Roberts University; M.S., 1985, Memphis State University

NEAL FRANKLIN JACKSON (1982), Associate Professor: B.S., 1977, Memphis State University; M.S., 1980, University of Arkansas

ROBERT E. MAGOWAN (1967), Professor: B.S., 1960, M.A., 1961, Eastern Kentucky University; Ed.D., 1967, Texas A&M University

O. RAYMOND MARTIN (1981), Assistant Professor: M.S., 1953, Virginia Tech University

THOMAS EUGENE MASON (1973), Assistant Professor: B.S.C.E., 1969, Michigan Technological University; M.A., 1972, Western Michigan University

SUSAN MAGUN SIMONS (1985), Assistant Professor: B.S.E.T., 1984, M.S., 1985, Memphis State University

BRUNO WALTER STRACK (1976), Assistant Professor: B.S.M.E., 1947, State Engineering College; Hagen, West Germany; B.A., 1971, South Alabama; M.Ed., 1973, Auburn University

MARK M. WILLIAMS (1984), Assistant Professor: B.S., 1982, M.S., 1984, Memphis State University

JAMES NELSON YADON (1976), Professor: B.S., 1954, M.S., 1957, Ph.D., 1974, Florida State University

MECHANICAL ENGINEERING

WILLIAM S. JANNA, Ph.D., *Chair*

W. DAVID BRUCE (1983), Assistant Professor: B.S.Ch.E., 1970, M.S., 1973, Ph.D., 1981, University of Tennessee, Knoxville

LARRY W. FITE (1989), Instructor: B.S.M.E., 1979, M.S.M.E., 1989, Memphis State University

SRIKANT GIR (1987), Assistant Professor: B.S.Ch.E., 1976, Osmania University, India; M.S.Ch.E., 1977, Oklahoma State University

KURT GRAMOLL (1988), Assistant Professor: B.S., 1982, M.S., 1984, University of Utah; Ph.D., 1988, Virginia Polytechnic Institute and State University

WILLIAM S. JANNA (1987), Professor, *Chair*: B.S.M.E., 1971, M.S.M.E., 1973, Ph.D., 1976, University of Toledo

GLADIUS LEWIS (1987), Associate Professor: B.Sc., 1972, University of London, England, M.Sc., 1974, Council for National Academic Awards, England; Ph.D., 1976, University of Nottingham, England

EDWARD H. LIN (1985), Assistant Professor: B.S.M.E., 1974, National Chung-Hsing University; M.S.M.E., 1980, Ph.D., 1985, University of Cincinnati

CHU-HO LU (1989), Assistant Professor: B.S.M.E., 1977, Chung-Yuan University (Taiwan); M.S.M.E., 1984, Ph.D., 1989, Syracuse University

EDWARD H. PERRY (1970), Professor: B.S., 1966, M.S., 1967, Ph.D., 1970, California Institute of Technology

STEVE SCESA (1978), Associate Professor: B.S., 1949, M.S., 1951, Ph.D., 1954, University of California

TEONG ENG TAN (1984), Assistant Professor: B.Sc.E., 1980, M.Sc.E., 1981, University of New Brunswick, Canada; Ph.D., 1984, Iowa State University

SAMUEL B. THOMASON (1984), Associate Professor: B.S., 1967, M.E., 1974, University of South Carolina; Ph.D., 1979, North Carolina State University

C. RAY WIMBERLY (1989), Professor: B.S.A.E., 1961, Texas A & M; M.S.M.E., 1965, University of Alabama; Ph.D., 1968, Texas A & M

FACULTY DIRECTORS

ALLISON GRAHAM, Ph.D., *Co-Director of Women's Studies*
MELINDA PARSONS, Ph.D., *Co-Director of Women's Studies*

FACULTY COUNCIL

JOHN BAUR, D.M.A., *Music*

PHILI DEBOO, Ph.D., *Geological Sciences*

WILLIAM DeLOACH, Ph.D., *English*

LEE DROUIN, M.S.E.E., *Engineering Technology*

SARAH HANKINS, Ph.D., *Theatre and Communication Arts*

JOSEPH HAWES, Ph.D., *History*

MELVIN HUMPHREYS, Re.D., *Health, Physical Education, and Recreation*

JOHN JOHNSTON, Ph.D., *Curriculum and Instruction*

EARL ("GENE") PEARSON, M.U.R.P., *City and Regional Planning*

MARS PERTL, Ph.D., *Finance, Insurance, and Real Estate*

ROBERT TAYLOR, Ph.D., *Management*

CHARLES WILLIAMS, Ph.D., *Anthropology*

INDEPENDENT DEPARTMENTS AND PROGRAMS

AEROSPACE STUDIES

GLENN F. BAKER, Lt. Col.,

Professor of Aerospace Studies

GLENN F. BAKER (1988), Lieutenant Colonel, United States Air Force; Professor: B.S., 1970, Memphis State University; M.A., 1975, Central Michigan University

LEE H. MURRAY (1987), Captain, United States Air Force; Assistant Professor: B.S., 1979, M.S., 1983, University of Arkansas

LAURENCE D. SCHARFF (1988), Captain, United States Air Force; Assistant Professor: B.B.A., 1983, University of Georgia; M.S., 1987, Oklahoma State University

RANDALL C. AGEE (1989), Captain, United States Air Force, Assistant Professor: B.S., 1976, M.A., 1979, East Tennessee State University

BILLY R. FARMER (1985), Staff Sergeant, United States Air Force; Non-Commissioned Officer in Charge of Personnel

TERRY L. FLOYD (1986), Sergeant, United States Air Force; Non-Commissioned Officer in Charge of Administration

MILITARY SCIENCE

WILLIAM J. CORADINI, M.A., *Professor of Military Science*

SAMUEL C. BLANCHARD (1988), Captain, United States Army; Assistant Professor of Military Science: B.B.A., 1979 University of Texas - El Paso

NANCY L. BYRD Captain, United States Army; Assistant Professor of Military Science: B.S., 1980, American Technological University; M.A., 1984, Webster University

WILLIAM J. CORADINI, Lieutenant Colonel, United States Army; Professor of Military Science: B.A., 1966, Spring Hill College; M.A., 1973, University of Alabama

GARY L. HARBER (1989), Captain, Assistant Professor of Military Science: B.S., 1985, Middle Tennessee State University

RONNIE L. HALL (1985), Staff Sergeant, United States Army; Chief Administrative Non-Commissioned Officer: B.A., 1987, University of Maryland, University College

ROBERT P. LOMBARDI (1987), Captain; Assistant Professor of Military Science: B.S., 1979, University of Rhode Island; M.A., 1983, Webster University

JOSEPH M. MATTINGLY (1989), Captain, Assistant Professor of Military Science: B.S., 1986, Troy State University

GARY L. MCPHERON (1989), Sergeant, United States Army; Supply Non-Commissioned Officer: A.A., 1989, University of Alaska, Fairbanks

PATRICK W. SEARS, Master Sergeant, United States Army; Senior Instructor

VIRGINIA M. TUCKER, Sergeant, United States Army; Administrative Non-Commissioned Officer

RAYMOND E. THEDFORD (1989), Sergeant First Class, Principal Drill Instructor

UNIVERSITY COLLEGE

H. RAMSEY FOWLER, Ph.D., *Dean of University College*

SUSANNE B. DARNELL, Ph.D., *Associate Dean*

STEPHEN D. BENHAR, Ph.D., *Director of Bornblum Judaic Studies*

LUCINDA CHANCE, Ed.D., *Director of Extended Programs*

ERROL JOHNSON, M.Ed., *Director of Special Programs*

CLAIRE LOWERY, M.S.S.W., *College Advisor and Graduation Analysis*

MARTHA ARMSTRONG, B.A., *Coordinator of Mini College*

NAVAL SCIENCE

ROBERT A. CONDER, M.A.

Professor of Naval Science

ROBERT A. CONDER (1988), *Captain, United States Navy; Professor of Naval Science: B.A., 1964, Western State College; M.A., 1971, University of Idaho*

CLIFFORD B. SCHMIDT (1986), *Commander, United States Navy; Associate Professor of Naval Science: B.S., 1972, Naval Postgraduate School*

WALTER E. HOLLAND (1989), *Lieutenant, United States Navy Reserve; Assistant Professor of Naval Science: B.S.E., 1985, Purdue University*

RICKY D. McDANIEL (1988), *Lieutenant, United States Navy; Assistant Professor of Naval Science: B.S., 1983, Arkansas State University*

ERIC W. ZORN (1989), *Lieutenant, United States Navy; Assistant Professor of Naval Science: B.A., 1984, University of Washington*

GLEN WHITE (1988), *Captain, United States Marine Corps; Assistant Professor of Naval Science: B.S., 1979, National University*

JOHN GOTTSCHALK (1990), *Chief Petty Officer, United States Navy; Administrative Assistant*

ARTHUR N. MCQUEEN (1988), *Chief Petty Officer, United States Navy; Assistant Navigation Instructor*

WILLIAM J. TOWERY (1987), *Chief Petty Officer, United States Navy; Unit Storekeeper*

DENNIS E. CROSS (1987), *Gunner Sergeant, United States Marine Corps; Drill Instructor*

AUDIOLOGY AND SPEECH PATHOLOGY

MAURICE I. MENDEL, *Chair*

ROBYN COX (1977), *Professor: B.S., 1969, M.A., 1971, Ball State University; Ph.D., 1974, Indiana University*

HERBERT J. GOULD (1987), *Assistant Professor: B.A., 1972, Michigan State University; M.A., 1974, Ph.D., 1975, University of Illinois*

JOEL KAHANE (1974), *Associate Professor: B.A., 1969, M.S., 1972, Brooklyn College; Ph.D., 1975, University of Pittsburgh*

ALAN KAMHI (1982), *Associate Professor: B.A., 1972, University of Wisconsin; M.A., 1976, Ph.D., 1979, Indiana University*

WALTER MANNING (1977), *Professor: B.A., 1964, Lycoming College; M.Ed., 1967, Pennsylvania State University; Ph.D., 1972, Michigan State University*

MAURICE I. MENDEL (1988), *Professor, Chair: B.A., 1965, University of Colorado; M.S., 1967, Washington University; Ph.D., 1970, University of Wisconsin*

ANN L. MICHAEL (1989), *Assistant Professor: M.A., 1978, Appalachian State University*

ROBERT F. ORLIKOFF (1988), *Assistant Professor: B.A., 1981, Rutgers University, M.S., 1983, Ph.D., 1988, Columbia University*

GERALD STUDEBAKER (1979), *Distinguished Professor: B.S., 1955, Illinois State University; M.S., 1956, Ph.D., 1960, Syracuse University*

CAROL S. SWINDELL (1986), *Assistant Professor: B.S., 1977, Edinboro State University; M.A., 1981, Ph.D., 1986, University of Pittsburgh*

LIBRARIES

LESTER J. POURCIAU, JR., *Director*

HARRIET SEMES ALEXANDER (1977), *Assistant Professor: B.A., 1971, Arkansas State University; M.A., 1972, Memphis State University; M.S., 1974, University of Illinois*

RITA BROADWAY (1975), *Assistant Professor: B.A., 1965, Northeast Louisiana University; M.S.L.S., 1971, Louisiana State University; M.A., 1983, Memphis State University*

KIT S. BYUNN (1973), *Assistant Professor: B.A., 1962, National Chengchi University; M.A., 1967, Appalachian State University; M.S., 1979, Memphis State University*

FRANCISCA CO (1985), *Assistant Professor: B.S., 1969, University of Santo Thomas; M.A., 1983, University of Wisconsin-Madison*

BARBARA ANN DENTON (1974), *Assistant Professor: B.A., 1961, University of Southern Mississippi; M.S., 1964, Louisiana State University; M.B.A., 1980, Memphis State University*

IAN M. EDWARD (1973), *Assistant Professor: B.A., 1968, M.S., 1972, Florida State University; M.B.A., 1980, Memphis State University*

JOHN EDWARD EVANS, (1980), *Associate Professor: B.A., 1974, Kansas Wesleyan; M.S., 1977, University of Illinois*

MICHELE FAGAN (1988), *Assistant Professor: B.A., 1969, M.A., 1971, University of Nebraska; M.L.S., 1974, San Jose University*

MARY K. FREILICH (1935), *Assistant Professor: B.A., 1970, M.A., 1971, Purdue University; M.L.S., 1982, State University of New York-Albany*

ANNELLE R. HUGGINS (1981), *Assistant Professor: B.S., 1969, Central State University; M.L.S., 1970, George Peabody College; M.Ed., 1975, Texas A&M University*

ROSS M. JOHNSON (1982), *Instructor: B.A., 1976, Memphis State University; M.L.S., 1979, George Peabody College*

JOYCE A. MCKIBBEN (1979), *Assistant Professor: B.A., 1971, Eckerd College; M.A.L.S., 1972, University of Kentucky; M.A., 1979, University of Florida*

GUY THOMAS MENDINA (1980), *Assistant Professor: B.A., 1967, M.L.S., 1978, University of Texas at Austin*

ANNA BRUCE NEAL, (1980), *Assistant Professor: B.A., 1973, University of Kentucky; M.L.S., 1978, George Peabody College*

PAMELA RAE PALMER (1973), *Associate Professor: B.A.E., 1970, University of Mississippi; M.S., 1972, Louisiana State University; M.A., 1978, Memphis State University; Ed.D., 1985, Memphis State University*

ELIZABETH H. PARK (1983), *Assistant Professor: A.B., 1966, Stanford University; M.L.S., 1972, State University of New York*

LESTER J. POURCIAU, JR. (1970), *Professor, Director: B.A., 1962, M.S., 1964, Louisiana State University; Ph.D., 1975, Indiana University*

MARTHA JANE QULLS (1979), *Assistant Professor: B.S., 1969, Memphis State University; M.L.S., 1978, George Peabody College; M.A., 1983, Memphis State University*

NORMA JANELL RUDOLPH (1979), *Assistant Professor: B.A., 1970, M.A., 1972, Memphis State University; M.L.S., 1979, George Peabody College*

PHILIP M. SMITH (1982), *Associate Professor: B.M.E., 1970, B.M., 1972, M.A., 1976, University of Kansas; M.L.S., 1981, Florida State University*

ODIE HENDERSON TOLBERT, JR. (1969), *Assistant Professor: B.A., 1962, LeMoyne-Owen College; M.A., 1969, Northern Illinois University; Advanced Certificate Black Studies Librarianship, 1973, Fisk University*

ELZA ANN VILES, (1980), *Associate Professor: B.M., 1967, University of Tennessee; M.A., 1970, University of Tennessee; M.S.L.S., 1971, University of North Carolina; Ph.D., 1983, Bryn Mawr College*

HUEYCHYI WANG, (1986), *Instructor: B.A., 1981, Fu-Jen Catholic University; M.A., 1985, University of South Carolina*

SAUNDRA WADE WILLIAMS, (1980), *Assistant Professor: B.A., 1967, University of Arkansas; M.L.S., 1977, George Peabody College; M.A.P.A., 1985, Memphis State University*

1991-92 TENTATIVE CALENDAR

This calendar is tentative, and students should check the 1991-92 *Undergraduate Catalog* and the *Schedule of Classes* for possible changes or additions.

FALL SEMESTER 1991

AUGUST 21: Meeting of new members of the University faculty, 8:30 A.M. Meeting of entire University faculty, 10:30 A.M., followed by meetings of colleges and departments.

AUGUST 22: Faculty advising for Fall 1991 Registration.

AUGUST 23 and 26-28: FALL 1991 Regular Registration and Drop/Add. Fall detailed dates and times, see the *Schedule of Classes* for the Fall 1991 Semester.

AUGUST 29: Classes begin.

SEPTEMBER 2: Holiday: Labor Day.

SEPTEMBER 5: Last day to add or to register for Fall 1991 courses.

SEPTEMBER 25: Last day for removing Summer Session "Incomplete" grades.

OCTOBER 18: Last day for all students to drop courses. Last day for all students to withdraw from the University.

NOVEMBER 11-14, 18-21, and 25-27: SPRING 1992 Priority Registration. For detailed dates and times, see the *Schedule of Classes* for the Spring 1992 Semester.

NOVEMBER 20: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in May, 1992.

NOVEMBER 28 - DECEMBER 1: Holiday: Thanksgiving.

DECEMBER 5: Classes end. (Regularly scheduled MWF morning classes will meet at corresponding times today.)

DECEMBER 6-12: Final examinations.

DECEMBER 14: Commencement.

SPRING SEMESTER 1992

JANUARY 8-10 and 12: SPRING 1992 Continuous Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Spring 1992 Semester.

JANUARY 10: Faculty advising.

JANUARY 13-16: SPRING 1992 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Spring 1992 Semester.

JANUARY 17: Classes begin.

JANUARY 20: Holiday: Martin Luther King's Birthday.

JANUARY 23: Last day to add or to register for Spring 1992 courses.

JANUARY 28: Last day for removing Fall "Incomplete" grades.

MARCH 6: Last day for all students to drop courses. Last day for all students to withdraw from the University.

MARCH 8-15: Spring Break.

APRIL 6-9: SUMMER 1992 Priority Registration. For detailed dates and times, see the *Schedule of Classes* for the Summer 1992 Semester.

APRIL 8: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in August, 1992.

APRIL 13-16 and 20-23: FALL 1992 Priority Registration. For detailed dates and times, see the Fall 1992 *Schedule of Classes*.

APRIL 29: Classes end.

APRIL 30: Study Day.

MAY 1-7: Final examinations.

MAY 9: Commencement

see the *Schedule of Classes* for the Summer 1992 Session.

JULY 7: Second Summer Term classes begin.

JULY 8: Last day to add or register for Second Summer Term courses

JULY 22: Last day for making application to the dean of the appropriate undergraduate college for degrees to be conferred in December, 1992.

Last day for all students to drop Second Summer Term courses.

Last day for all Second Summer Term students to withdraw from the University.

AUGUST 3-6: FALL 1992 Continuous Registration and Drop/Add. For details, see the Fall 1992 *Schedule of Classes*.

AUGUST 6: Second Summer Term classes end.

AUGUST 7: Second Summer Term exams.

AUGUST 9: Commencement.

FIRST SUMMER TERM 1992

MAY 21, 22, 24: SUMMER 1992 Continuous Registration. For detailed dates and times, see the Summer 1992 *Schedule of Classes*.

MAY 25: Faculty advising.

MAY 25-27: SUMMER 1992 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Summer 1992 Session.

MAY 28: Classes begin.

MAY 29: Last day to add or to register for First Term courses.

JUNE 5: Last day for all students to drop First Summer Term courses.

Last day for all First Summer Term students to withdraw from the University.

JUNE 23: Last day for removing Spring Semester "Incomplete" grades.

JUNE 22-25: SECOND SUMMER and FALL 1992 Continuous Registration and Drop/Add. For details, see the *Schedule of Classes* for the particular term.

JUNE 30: First Summer Term classes end.

JULY 1: First Summer Term exams.

EXTENDED SUMMER TERM 1992

MAY 25: Faculty advising.

MAY 25-27: SUMMER 1992 Regular Registration and Drop/Add. For detailed dates and times, see the *Schedule of Classes* for the Summer 1992 Session.

MAY 28: Classes begin.

MAY 29: Last day to add or to register for Extended Term courses.

JUNE 12: Last day for all students to drop Extended Summer Term courses.

Last day for all Extended Summer Term students to withdraw from the University.

JUNE 23: Last day for removing Spring Semester "Incomplete" grades.

JULY 2-6: Holiday break: Independence Day.

JULY 6: SECOND SUMMER 1992 Continuous Registration and Drop/Add. For details, see the Summer 1992 *Schedule of Classes*.

AUGUST 3-6: FALL 1992 Continuous Registration and Drop/Add. For details, see the Fall 1992 *Schedule of Classes*.

AUGUST 6: Extended Summer Term classes end.

AUGUST 7: Extended Summer Term exams.

AUGUST 9: Commencement.

SECOND SUMMER TERM 1992

JULY 6: SECOND SUMMER 1992 Regular Registration and Drop/Add. For detailed dates and times,

INDEX

(numbers refer to the beginning page number)

A

Academic calendar (1990-91), 4; tentative (1991-92), 142.
 Academic Counseling Unit, 2, 24.
 Academic Fresh Start, 32.
Academic Regulations, 29.
 Academic status, 32.
Accountancy, School of: courses, 70; majors and minors, 67.
 Accreditation, 7.
 Activity fee, student, 15, 16.
 Adding courses, 29; fees, 17.
 Admission to teacher education program, 94.
Admission to the University, 11.
 Adult and Commuter Student Services, 26.
 Advanced Placement credit, 34.
 Advanced standing, admission with, 33.
 Advising, 5, 24, 29, 37.
 Aerospace Studies, 124.
 Aid, Financial, 18.
 Alcohol and Drug Abuse Services, 120.
 Alumni, 10.
 American Heritage General Education Requirement, 35 (See advisor and particular degree and major requirements).
Anthropology: courses, 45; major and minor, 41.
 Appeals procedures, 29; fees, 18, 23; grade, 31.
 Application fee, 15.
 Applied Music fees, 17.
Architectural Technology: major, 108.
 Armed forces, credit for services in, 33.
Art: Bachelor of Fine Arts degree requirements, 75; courses, 81; minor (B.A.), 80.
Art History: major, (B.A.), 80
ARTS AND SCIENCES, COLLEGE OF, 38-62.
 Attendance: class, 29.
 Auditing courses, 14, 31; fees, 15.
 Audiology and Speech Pathology, courses, 128.
 Automobiles on campus: fees, 17, 26.
 Aviation Administration (B.P.S.), 120.

B

Bachelor of Arts (B.A.), 38, 40, 74, 80.
 Bachelor of Business Administration (B.B.A.), 63, 66.
 Bachelor of Fine Arts (B.F.A.), 74, 75-77.
 Bachelor of Liberal Studies (B.L.S.), 117, 119.
 Bachelor of Music (B.M.), 77, 78.
 Bachelor of Professional Studies (B.P.S.), 117, 120.
 Bachelor of Science (B.S.), 38, 40.
 Bachelor of Science in Chemistry (B.S.Ch.), 40.
 Bachelor of Science in Civil Engineering (B.S.C.E.), 105, 106.
 Bachelor of Science in Education (B.S.Ed.), 92, 93-98.
 Bachelor of Science in Electrical Engineering (B.S.E.E.), 105, 106.
 Bachelor of Science in Engineering Technology (B.S.E.T.), 105, 108.
 Bachelor of Science in Home Economics (B.S.H.E.), 92, 96.
 Bachelor of Science in Mechanical Engineering (B.S.M.E.), 105, 107.
 Bachelor of Science in Medical Technology (B.S.M.T.), 41.
 Bachelor of Science in Nursing (B.S.N.), 114, 115.
 Bachelor's degree, general requirements, 35-36; second, 36.
Biology: courses, 46; major, concentrations, and minor, 42.
 Biomedical Illustration (B.P.S.), 120.
 Black Studies (B.L.S.), 119; minor, 121.
 Bookstore (See University Store), 26.
 Bureau of Business and Economic Research, 8.
 Bureau of Educational Research and Services, 8.
BUSINESS AND ECONOMICS, FOGLMAN COLLEGE OF, 63-74.

C

Calendar, University, 4.
 Calendar, tentative, 1991-92, 142.
 Campus Directory, 2.
 Career Counseling and Placement, 2, 24, 25.
 Cartographic Services Laboratory, 8.
 Catalog applicability, 36.

Center for Earthquake Research and Information, 8.
 Center for Electron Microscopy, 8.

Center for the Humanities, 8.
 Center for Instructional Services and Research, 9.

Center for Student Development, 24.

Center for the Study of Higher Education, 8.

Center for Manpower Studies, 8.

Center for Research on Women, 8.

Centers and Chairs of Excellence, 9.

Certification (licensure) of teachers, 36.

Chemistry: courses, 47; majors, concentrations, and minors, 40, 42.

Chucalissa Indian Museum, 8.

Civil Engineering: courses, 110; major and concentrations, 105, 106.

Class Attendance, 29.

Classification of students, 30.

C.L.E.P. Examinations, 34.

Combination Senior, 14.

Commercial Aviation, 120.

Commercial Music: fees, 17; major, 77-78; courses, 88.

COMMUNICATION AND FINE ARTS, COLLEGE OF, 74-91.

Communications, 27.

Computation Intensive General Education Requirement, 35 (See advisor and particular degree and major requirements).

Computer facilities, 7.

Computer literacy, requirements for all baccalaureate degrees, 35.

Computer Science: major, minor, 42; courses, 57.

Computer Systems Technology: major, 108.

Concentrations, listing of, 38, 63, 74, 92, 105.

Concurrent enrollment, 13.

Contract Degree, 118.

Correspondence courses, credit limitation on and permission for, 34.

Counseling, 2, 24.

Counselling and Personnel Services: courses, 98.

Courses: adding and dropping, 17, 29; auditing, 14, 15, 31; correspondence, 34; description of, 37; explanation of numbering, 37; extension, 34; for credit/no credit, 31; repetition of, 31.

Credit by examination, fees 17, 34.

Credit no-credit courses, 31.

Credits:

Advanced Placement, 34, 75; definition of semester hour, 30; maximum and minimum, 30; correspondence and extension, 34; credit by examination, 34; credit for experiential learning, 35, 75, 123.

Criminal Justice: courses, 49; major and concentrations, 42.

Curriculum and Instruction: courses, 99.

D

Dance: courses, 90; concentration, 77.

Dean's List, 33.

Decision Sciences: major, 68.

Degrees, (See Bachelor): second bachelor's 36; University requirements for all baccalaureate degrees, 35.

Dentistry, pre-professional, 36, 39.

Departments, listing of, 3.

Development, 10.

Developmental Studies, 129.

Diploma fee (graduation fee), 17.

Distinguished Scholarship Programs, 18.

Dormitories (Residence Halls), 16.

Drama (See THEATRE AND COMMUNICATION ARTS).

Dropping courses, 17, 29.

E

Early Admission, 13.

Economics: courses, 70; major and minor (College of Arts and Sciences), 42; major and minor (College of Business and Economics), 67.

EDUCATION, COLLEGE OF, 92-104.

Educational Administration and Supervision, 100.

Educational Services: degree program, 95.

Educational Support Program, 24.

Electrical Engineering: courses, 111; major and concentrations, 107.

Electronics Technology: major, 110.

Elementary Education: major and endorsement. (See College of Education advisor).

Employment, part-time student, 2, 22.

ENGINEERING, HERFF COLLEGE OF, 105-114.

Engineering Technology: courses, 111; majors, concentrations, and minors, 108.

English: courses, 50; major and minor, 42.

English Composition General Education Requirement, 35.

Enrollment Management, 25.

Enrollment Transactions, 30.

Entrance examination, 11.

Entrance Requirements: high school curriculum, 14.

Evening Academic Services, 2, 10.

Executive Center, Fogelman, 7.

Expenses, summary, 18.

Experiential Learning Credit, 35, 75; fees, 17; courses, 123.

Extension Credit, 34.

F

Faculty and Staff, 131.

Fees, 15.

Finance: major and minor, 68.

Finance, Insurance and Real Estate: courses, 71.

Financial aid, 18.

Financial Services: major, 68.

Fine Arts Heritage General Education Requirement, 35 (See advisor and particular degree and major requirements).

Fire Administration and Protection Technology: (B.P.S.), 120.

Fitness and Wellness General Education Requirement, 35, (See advisor and particular degree and major requirements).

Fogelman Executive Center, 7.

FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS, (See BUSINESS AND ECONOMICS).

Foreign Languages: (French, German, Greek, Italian, Japanese, Latin, Russian, Spanish) Courses, 51; major, concentrations, and minor, 42; foreign language requirements, 39.

Foreign Students (International Students), 23; admission of, 12.

Former students, readmission of, 14.

Foundations of Education: courses, 100.

Fraternities, 2, 26.

French, (See FOREIGN LANGUAGES): courses, 51.

Fresh Start, 32.

Freshmen: Admission, 11; classification, 30.

G

General Education: University requirements, 35 (See advisor and particular degree requirements for specifics).

Geography: courses, 53; major, concentrations, and minor, 43.

Geological Sciences: courses, 54; major, concentrations, and minor, 43.

German, (See FOREIGN LANGUAGES): courses, 52.

Goals of the University, 6.

Good standing, 32.

Goodwyn Institute Lectures, 27.

Governing body of the University, 6.

Government, Student, 2, 25.

Grade appeals procedure, 31.

Grade points: (See quality points), 30.

Grading system, 30.

GRADUATE SCHOOL, THE, 10.

Graduation: Deferred (catalog applicability), 36; fee, 17; general requirements for all baccalaureate degrees, 35; with distinction, 33. (See also Degrees).

Grants, 21.

Greek, (See FOREIGN LANGUAGES): courses, 51.

H

Handicapped Student Services: (See Students with Disabilities), 2, 15, 24.

Health Care Fields: (B.P.S.), 120.

Health Center Services, 2, 24.

Health Insurance (student), 25.

Health, Physical Education, and Recreation: courses, 100; majors, concentrations, and minors, 97.

Health, Physical Education and Recreation Complex, 8.

HERFF COLLEGE OF ENGINEERING, (See ENGINEERING).
 High School Curriculum Required for Admission, 14.
 High School Student enrollment, (See concurrent enrollment), 13.
 Higher Education Alliance, 8, 117.
 Historical/Philosophical Heritage General Education Requirement, 35. (See advisor and particular degree and major requirements).
History: courses, 54; major and minor, 43.
 History of the University, 6.
Home Economics: courses, 102; majors and concentrations, 96.
 Honors and Awards, 27.
HONORS PROGRAM, UNIVERSITY, 124.
 Housing, student, family, 16.
 Human Services: (B.P.S.), 120.

Identification cards, 17.
 Incomplete, explanation of grade, 30.
 Indebtedness to University, 15.
Individual Studies: major (contract degree), 118.
 Institute for Engineering Research, 8.
 Institute of Governmental Service and Research, 9.
 Insurance, (See FINANCE, INSURANCE, AND REAL ESTATE, AND HEALTH INSURANCE).
 Integrative General Education Requirement, 35.
 Interdisciplinary Studies, 129.
International Business: major and minor, 69.
International Relations: major 43; courses, 56.
 International students, 23, admission of, 12.
 International Studies, 123.
 Intramurals, 26.
 Italian, (See FOREIGN LANGUAGES): courses, 52.

J-L

Jackson Center, 8, 117.
Japanese, (See FOREIGN LANGUAGES): courses, 52.
Journalism: courses, 83; major, concentrations, and minor, 80.
 Judaic Studies: Bornblum, 121.
 Juniors, classification of, 30.
 Laboratory Deposits, 17.
 Late registration fee, 17.
 Latin, (See FOREIGN LANGUAGES): courses, 51.
LAW, CECIL C. HUMPHREYS SCHOOL OF, 10.
 Law Enforcement, (See CRIMINAL JUSTICE).
 Law, pre-law: College of Arts and Sciences, 39; College of Business and Economics, 64.
 Legal Assistant Certificate, 121.
 Legal Thought and Liberal Arts; minor, 121.
 Liberal Studies, 119, 122.
 Library, 2, 7, 129.
 Literary Heritage General Education Requirement, 35 (See advisor and particular degree and major requirements).
 Load, maximum and minimum semester-hour, 30.
 Loans, 22.

M

Maintenance fee, 16.
 Majors: listing of, 38, 63, 74, 92, 105, 114, 117.
Management: courses, 72; major, concentrations, and minor, 68.
Management Information Systems & Decision Sciences: courses, 72; major and minor, 68.
Manufacturing Technology: major, 109.
Marketing: courses, 73; major, concentrations, and minor, 69.
 Marketing Education: courses, 103.
 Married student: family housing, 16.
 Mathematics General Education Requirement, 35 (See advisor and particular degree and major requirements).
Mathematical Sciences: courses, 56; major, concentrations, and minor, 43.
 Meals, 17.
Mechanical Engineering: courses, 113; major and concentrations, 108.
 Medical Technology, Bachelor of Science in, 41.
 Medicine, pre-professional, 39.
 Memphis Community, 7.
 Military Science, 126.
 Mini College, 14, 117.

Minors: (See Colleges, Degree Programs and Courses, Accountancy, Anthropology, Art, Biology, Black Studies, Chemistry, Coaching, Computer Science, Criminal Justice, Economics, English, Finance, Foreign Languages, Geography, Geological Sciences, Health and Safety, History, International Business, Journalism, Legal Thought and Liberal Arts, Management Information Systems, Management, Marketing, Mathematical Sciences, Music, Philosophy, Photography, Physical Education, Physical Science, Physics, Political Science, Pre-Professional Business Administration, Psychology, Public Administration, Real Estate, Recreation, Religion in Society, Risk Management and Insurance, Safety, Sales/Marketing, Social Work, Sociology, Surveying, Technology, Theatre and Communication Arts, Women's Studies).

Music: Bachelor of Music degree requirements, 77, 78; courses, 84; fees, 17; minor: (B.A.), 80. (See also Commercial Music).
 Music Locker Deposit, 17.

N-O

Nash, C.H., Museum, 8.
 Natural Science General Education Requirement, 35 (See advisor and particular degree and major requirements).
 Naval Science, 128.
 No-More-Checks Status, 17.
 Noncollegiate Sponsored Instruction, 34.
Nursing, Loewenberg School of: Bachelor of Science, 115; courses, 116.
 Optometry, 39.
 Oral Communication and Rhetoric General Education Requirement, 35 (See advisor and particular degree and major requirements).
 Organization of the University, 7.
 Orientation program, 25, 129.
 Orthotics/Prosthetics: (B.P.S.), 120.

P

Paralegal Studies, 121.
 Payment of Fees and Debts, 15.
 Personal/Psychological Counseling, 2, 24.
 Pharmacy, 39.
Philosophy: courses, 58; major and minor, 44.
 Physical Activity, required courses for all baccalaureate degrees, 35; fees, 17.
Physical Education: major and minors, 97; courses, 100.
Physics: courses, 58; major and minor, 44.
 Placement, Advanced, 34
 Placement Examination, 34; fees, 17.
 Placement Services, 2, 25.
 Planning, (See Geography and Planning).
 Planning and Public Service, 10.
Political Science: courses, 59; major, concentrations, and minors, 44.
 Post Office, 26.
 Printing Management: (B.P.S.), 120.
 Privacy Rights, 33.
 Probation, academic, 32.
 Program Phase Out Calendar, 4.
 Psychological Services Center, 10.
Psychology: courses, 61; major and minor, 44.
 Publications, 26.
 Public Service, 10.

Q-R

Quality Points, 30; required for graduation, 35.
 Readmission of former students, 14.
Real Estate: major and minor, 68.
 Recreation: minor, 98; courses, 102.
 Recreation Services, 26.
 Refund of fees, 15; appeals, 18.
 Regional Economic Development Center, 9.
 Registration, 29.
 Registration, fee for late, 17.
Rehabilitation Education: major, 96.
 Religion in Society: minor, 122.
 Religious activities and organizations, 2, 25.
Remedial and Developmental Studies, 129.
 Rent: dormitory room, 16.
 Repeating Courses, 31.
 Residence halls, 16.
 Residence requirements for graduation, 35.
 Retention standards: academic status, 32.

Returned Checks, 17.

Risk Management and Insurance: major and minor, 68.
ROTC, (See AEROSPACE STUDIES, MILITARY SCIENCE or NAVAL SCIENCE).
 Russian, (See FOREIGN LANGUAGES): courses, 51.

S

Safety Education: courses, 100.
 St. Francis Hospital, cooperative program in medical technology, 41.
Sales/Marketing: major and minor, 69.
 Satisfactory Progress for Financial Aid, 23.
 Scholarships, 18.
 Scholastic standards, 30.
 Second bachelor's degree, 36.
 Semester hour, defined (Credit Hours and Maximum Load), 30.
 Senior citizen, audit admission, 14; fees, 15.
 Seniors, classification of, 30.
 Services for Aging: (B.P.S.), 120.
 Social Fraternities and Sororities, 26.
 Social Science General Education Requirement, 35 (See advisor and particular degree and major requirements).
Social Work: courses, 62; major and minor, 44.
Sociology: courses, 61; major, concentrations, and minors, 44.
 Sophomores, classification of, 30.
 Sororities, 2, 26.
 Spanish, (See FOREIGN LANGUAGES): courses, 52.
Special Education: courses, 103; majors and endorsement, 95.
 Special Undergraduate applicants, 12.
 Speech and Hearing Center, 9.
 Speech Pathology, 128.
 Student Activities Council, 26.
 Student Activity Fees, 15, 16.
 Student Aid, 18.
 Student Development, 2, 24.
 Student Employment, 2, 22.
 Student Family Housing, 16.
 Student Government, 2, 25.
 Student Housing, 16.
 Student Life, 25.
 Student teaching, 94.
 Summer Session: fees, Maintenance Fees, 15.
 Suspension, academic, 32.

T

"T" grade, 30.
 Teacher licensure, 36.
 Teacher Education Program, admission to, 93.
 Teaching, directed student, 94.
 Technology, (See ENGINEERING TECHNOLOGY).
 Tennessee Small Business Development Center, 10.
 Testing Center, 24.
 Testing requirements for graduation, 36.
Theatre, 27; major, 76.
Theatre and Communication Arts: courses, 88; Bachelor of Fine Arts, 76; major, concentrations, and minors: (B.A.), 80.
 Thematic Studies, 119, 122.
 Transcript fee, 17.
 Transfer Credit, 34.
 Transfer applicants, admission of, 11.
Transportation and Distribution: major, 69.
 Tuition for out-of-state students, 15, 18.

U-V-W

Unclassified Applicants, 13.
 University Center, 26.
UNIVERSITY COLLEGE, 117-123, fees, 17.
 University Health Center, 24.
 University Honors Program, 124.
 University Placement, 25.
 University Press, 10.
 University Store, 26.
 Veterans Services, 25.
 Veterinary medicine, 39.
 Withdrawal from the University, 29.
 Women's Studies: (B.L.S.), 121; (B.P.S.), 122; minor, 122.
 Writing Intensive General Education Requirement, 35 (See advisor and particular degree and major requirements).



INSTRUCTIONS FOR COMPLETING THE APPLICATION AND PROCEDURES FOR UNDERGRADUATE ADMISSION

ALL APPLICANTS

The application form should be completed carefully by all applicants seeking admission to any undergraduate program. Applications must be submitted prior to August 1 for fall admission; December 1 for spring admission; or May 1 for summer admission. Consideration of applications received after these deadlines will be in one of the special categories below.

A five dollar (\$5.00) non-refundable application fee is required for all applicants who have not previously applied to the University. Checks or Money Orders should be made payable to Memphis State University. For detailed information regarding admission policies and requirements, refer to the appropriate pages of the current MSU *Bulletin*. Applications should be returned to this address:

Admissions Office
Memphis State University
Memphis, Tennessee 38152

Transcripts, test scores and other academic credentials must be requested by the applicant from the issuing agency and forwarded directly to the Admissions Office. Copies of such credentials accepted from the applicant will be considered unofficial.

STUDENT LEVELS:

REGULAR UNDERGRADUATE APPLICANTS

Freshman (no previous college). Request a copy of your high school record. If your high school graduation is through the General Educational Development (GED) program, have these scores forwarded to the office. You must submit scores earned on the ACT or SAT examination for consideration. If you have not been in school within the last six (6) months, you may request information on an entrance examination administered by the University.

Transfer. Request an official copy of your academic record from each school in which you have enrolled. Applicants who have completed less than one year of college work must submit a high school record and ACT or SAT scores in addition to college transcripts. Concealment of previous college attendance may be cause for rejection or cancellation of admission.

SPECIAL CATEGORY APPLICANTS

Designed for applicants who wish to take only a limited number of undergraduate courses and who are not presently seeking a degree at the University.

Unclassified (no previous college). Evidence of high school graduation from an approved high school is required for applicants not yet 18 years of age.

Unclassified (with previous college). Request a statement of academic standing from the Registrar at the last school attended.

Special Undergraduate (with college degree). Request a statement indicating the degree earned and date awarded from the Registrar at that college.

Audit only. Permission to audit courses must be obtained from the appropriate department chairman prior to submitting the application.

INTERNATIONAL APPLICANTS

The University is authorized under Federal law to enroll non-immigrant, alien students on "F-1" student visas. The established deadlines for applying are: May 1 for fall admission; September 15 for spring admission; or February 1 for summer admission. For additional information, contact the International Student Office. International applicants should not use this application.

THE ADMISSIONS OFFICE is located in Suite 215 of the Administration Building. Office hours are 8:00 A.M. - 4:30 P.M. Monday through Friday. The telephone number for general admissions information is (901) 678-2101. On weekdays after 4:30 and on Saturday mornings, the telephone number is 678-2398.

Citizen of U.S.? Yes No

If no, what country? _____

SCREEN 2

Sex: Male Female

Type of Visa? _____

01 APP

Next of Kin: _____

Last Name

First Name or Initial

Parent

Address

03 SEX

Guardian

Street Number and Name

04 CIT

Spouse

City

State

Zip Code

05 ST

Other

06 CO

Are you a veteran? Yes No

07 VISA

Do you plan to attend MSU with Veteran's Assistance? Yes No

Have you been convicted of a crime other than a minor traffic violation? Yes No (If yes, attach statement.)

Are you employed full-time? Yes No If "Yes", give name, address, and telephone number of employer: _____

Dates of employment: From _____ To _____

11 KIN

Are you now living in Tennessee? Yes No Do you live with your parents? Yes No

16

Have you lived in Tennessee continuously since birth? Yes No

17

If you answered "No" to the previous question, answer the questions below.

18

When did you come or return to Tennessee? _____

What was the purpose of your coming or returning to Tennessee? _____

Do you consider yourself domiciled in Tennessee? (See definition on page 2.) Yes No

21 VET

Do you intend to enroll as a full-time student? Yes No

If you are a veteran, when did you enter military service? _____

SCREEN

What was your home of record? _____

01

From what state did you enter military service? _____

02

When did you or will you leave active duty? _____

03

The questions below are to be completed only by those who are on active military duty or those who are dependents of military personnel on active duty.

07

If you are on active duty, where are you stationed? _____

08

Are you a dependent of a person on active military duty? Yes No

10

If "Yes", where is he or she stationed? _____

11

What state did you (or your sponsor) declare as home of record? _____

DOC

In some instances out-of-state students are not required to pay out-of-state tuition. If you have a question about your status, please review paragraph 4 of the Guidelines for the Classification of Students for Fee-Paying Purposes, or discuss your case with the Admissions Advisor for Residency.

Additional information may be required to make a determination as to the classification of a student for fee-paying purposes. In these cases additional information will be requested by the University.

SSCH

If you are accepted as a student at this institution, there are certain performance tests you will be required to take during your academic career. It is a requirement of admission that you agree to take any tests deemed necessary by the institution. In those instances where tests are administered by an external entity, you hereby agree for the results of such tests to be released to the institution. The purpose of this requirement is to comply with the legislature's expressed intent that institutions regularly evaluate and improve instruction at all levels. If you are under twenty-one years of age and are required by institutional policy to complete the Academic Assessment and Placement Program (AAPP) tests, your scores on these tests and course placement may be reported to your high school for research purposes. Any test scores will be treated confidentially as required by law.

I certify that none of the information on this form is false or has been withheld. I further certify that I understand that giving false information or withholding information may make me ineligible for admission or to continue my enrollment at Memphis State University.

Signature _____

Date _____

Do Not Write Below This Line

Residency Action:

Admission Action:

Determination: (1) _____ Non-Res. _____

Approved: _____ Date: _____

By: _____ Date: _____

Not Approved: _____ Date: _____

Restrictions: _____

REMARKS:

Pending Items: _____

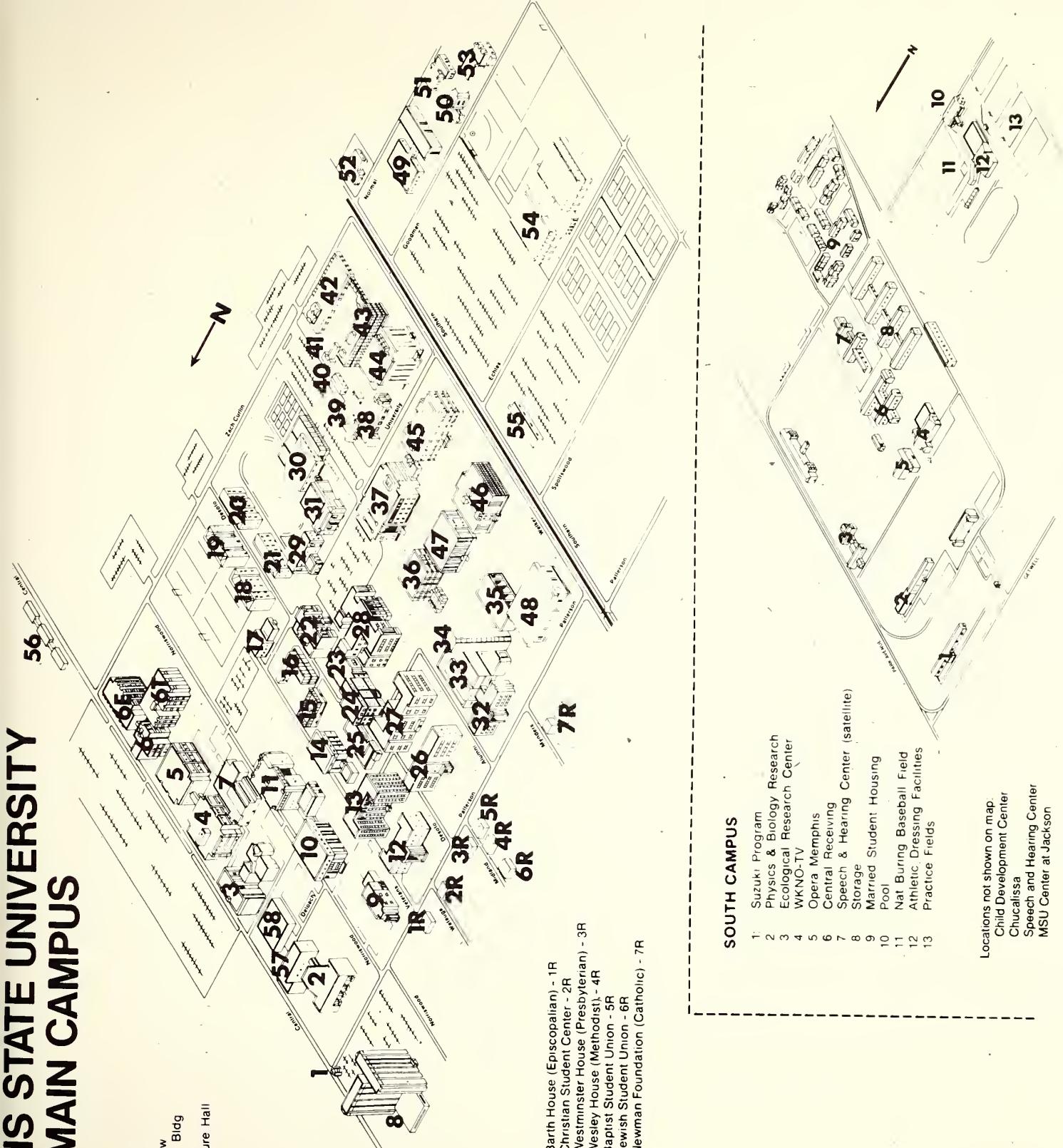
STATEMENT OF PROCEDURE

All credentials become the property of the University and cannot be forwarded or returned.

NOTE: Credentials will be maintained in active files for a 12-month period. After this period, credentials will be relegated to inactive status and must be submitted again before an admissions decision can be made.

NEEDS:

MEMPHIS STATE UNIVERSITY MAIN CAMPUS

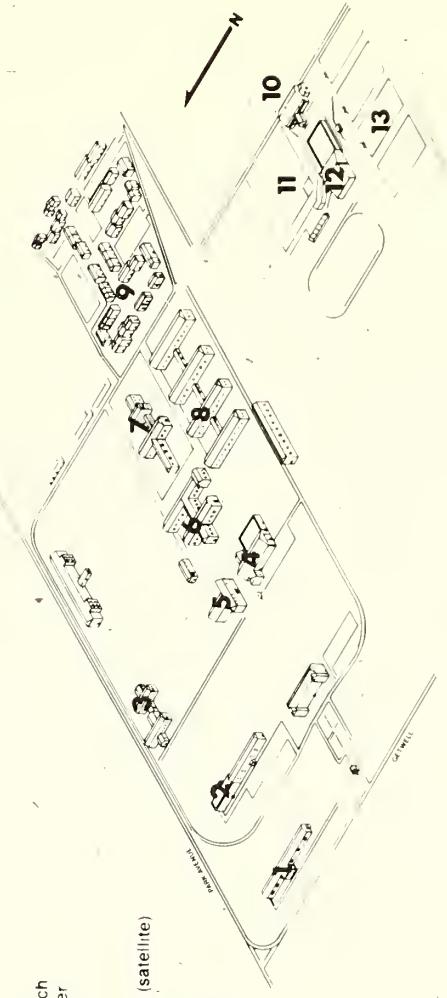


1. Information Center
 2. Fogelman College of Business and Economics—Classrooms
 3. Cecil C. Humphreys School of Law
 4. Theatre and Communications Arts Bldg
 5. Music Bldg
 6. Herff College of Engineering Lecture Hall
 6E. Herff College of Engineering
 6T. Engineering Technology
 7. Communication and Fine Arts
 8. Richardson Towers Residence Hall
 9. Fannellenic Bldg
 10. Psychology Bldg
 11. Dunn Mathematics and Foreign Languages Bldg
 12. Smith Residence Hall
 13. Rawls Residence Hall
 14. Neeman Journalism Bldg
 15. Heating & Power Plant
 16. Physical Plant & Planning
 17. Health Center
 18. McCord Residence Hall
 19. Browning Residence Hall
 20. Robison Residence Hall
 21. Hayden Residence Hall
 22. Manning Hall
 23. Tiger Den/Cafeteria
 24. Jones Hall
 25. Art Building
 26. West Residence Hall
 27. Mynders Residence Hall
 28. Administration Building
 29. Scales Hall
 30. Field House
 31. Old Gymnasium
 32. Johnson Hall
 33. Brister Library
 34. Brister Library Tower
 35. Mitchell Hall
 36. University Center
 37. Navy ROTC Bldg
 38. Army ROTC Bldg
 39. Special Education Bldg
 40. Army ROTC Bldg
 41. Campus School
 42. Ball Education Bldg
 43. Life Sciences Bldg
 44. Smith Chemistry Bldg
 45. Ellington Biology Bldg
 46. Central Humanities Bldg
 47. Patterson English Bldg
 48. South Residence Hall
 49. Newport Residence Hall
 50. Lambda Chi Alpha
 51. Athletic Office Bldg
 52. Alumni Center
 53. Physical Education Bldg
 54. Prinzing Services
 55. Center for Earthquake Research and Information
 56. Fogelman College of Business and Economics—Offices
 57. Fogelman Executive Center
 58. Research and Information Center

SOUTH CAMPUS

1. Suzuki Program
 2. Physics & Biology Research
 3. Ecological Research Center
 4. WKNO-TV
 5. Opera Memphis
 6. Central Receiving
 7. Speech & Hearing Center (satellite)
 8. Storage
 9. Married Student Housing
 10. Pool
 11. Natl. Burning Baseball Field
 12. Athletic Dressing Facilities
 13. Practice Fields

Locations not shown on map:
 Child Development Center
 Chucalissa
 Speech and Hearing Center
 MSU Center at Jackson



**Bulletin of
Memphis State University 1990-91
Memphis, TN 38152**

**Second Class Postage
Paid At
Memphis, Tennessee**

**Forwarding & Return Guaranteed
Address Correction Requested**

Memphis State
UNIVERSITY

PS 2/90-988

Memphis State University is an Equal Opportunity/Affirmative Action University. It is committed to education of a non-racially identifiable student body.